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A preliminary version of the Database Summary Sheet is available at:  
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=> D QUE L26  
L6 250130 SEA FILE=HCAPLUS ABB=ON POUCH? OR BAG# OR ENVELOP? OR PACKAG?  
  
L19 57366 SEA FILE=WPIX ABB=ON L6(4A) (MULTI? OR MANY OR SEVERAL? OR 2  
OR TWO OR 3 OR THREE)  
L20 1403 SEA FILE=WPIX ABB=ON L19(5A) (RECYC? OR TREAT? OR PROCESS OR  
DISPOS? OR REUS?)  
L21 13 SEA FILE=WPIX ABB=ON L20 AND DETERGENT?  
L22 5 SEA FILE=WPIX ABB=ON L21 AND (REUS? OR RECYC? OR REFILL?)  
L23 6 SEA FILE=WPIX ABB=ON L21 AND C11D?/IC  
L24 10 SEA FILE=WPIX ABB=ON L22 OR L23  
L25 3 SEA FILE=WPIX ABB=ON L21 AND WASTE?  
L26 10 SEA FILE=WPIX ABB=ON L24 OR L25

=> D L26 FULL 1-10

L26 ANSWER 1 OF 10 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
AN 2004-670857 [66] WPIX  
DNC C2004-239582 [66]  
DNN N2004-531608 [66]  
TI Treatment or recycling of waste single or  
multi-compartment detergent pouch, comprises

*applicant*

introducing **waste** pouch into mixing chamber, adding solvent, and converting resulting slurry to solid or semi-solid form

DC A35; A92; Q34

IN KINLOCH J I; SMITH D J; VEGA J L

PA (PROC-C) PROCTER & GAMBLE CO

CYC 107

PI EP 1462513 A1 20040929 (200466)\* EN 9[0] C11D017-04

US 20040192793 A1 20040930 (200466) EN C11D001-00

WO 2004085601 A1 20041007 (200466) EN

MX 2005010199 A1 20051101 (200625) ES B29B017-00

ADT EP 1462513 A1 EP 2003-251842 20030324; US 20040192793 A1 US 2004-805035 20040319; WO 2004085601 A1 WO 2004-US9046 20040324; MX 2005010199 A1 WO 2004-US9046 20040324; MX 2005010199 A1 MX 2005-10199 20050923

FDT MX 2005010199 A1 Based on WO 2004085601 A

PRAI EP 2003-251842 20030324

IC ICM C11D001-00; C11D017-04; B29B017-00

ICS B29B017-02; B65D065-46; C08J011-08

AB EP 1462513 A1 UPAB: 20051110

NOVELTY - A **waste** single or multi-compartment **detergent** pouch containing **detergent** or **detergent** auxiliary composition is treated or **recycled** by introducing **waste** pouch into mixing chamber, adding solvent or other solubilizing agent to partially dissolve an enveloping material and subjecting the mixture to mechanical mixing to form slurry, and converting resulting slurry to solid or semi-solid form.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) a **process** for making single or **multi**-compartment **detergent** pouch comprising forming open compartments, filling the compartment with **detergent** or **detergent** auxiliary composition comprising **recycled** materials, and closing and sealing the open compartments; and

(2) a multi-compartment pouch.

USE - Used in the treatment or **recycling** of **waste** single or **multi**-compartment **detergent** pouch (claimed), having polymeric enveloping materials.

ADVANTAGE - The invention produces no or minimum amount of residue.

TECH MECHANICAL ENGINEERING - Preferred Components: The pouch comprises at least 2 compartments containing compositions physically or chemically different from one another. The first compartment contains solid composition and the second compartment contains liquid composition.  
ORGANIC CHEMISTRY - Preferred Materials: The solid composition comprises detergent bleach and the liquid composition comprises amine.

FS CPI; GMPI

MC CPI: A11-C03; A12-P06

L26 ANSWER 2 OF 10 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

AN 2004-142685 [14] WPIX

CR 2002-241568; 2002-268971; 2002-291799; 2002-291800; 2002-291832; 2002-315258; 2002-329348; 2002-329404; 2002-329405; 2002-351439; 2002-557510; 2002-627216; 2002-627218; 2002-643358; 2003-167075; 2004-142686; 2004-375390

DNC C2004-057294 [14]

TI Composition for use in laundry processes, is contained in multi-compartment pouch where one compartment contains component that comprises liquid matrix and source of peracid

DC A97; D25; E14; A25; A26; E19

IN ALBANESI M; BURCKETT-ST LAURENT J C T R; BURCKERR-ST LAURENT R; BURCKETT ST LAURENT J C T R; BURCKETT-ST L J C; BURCKETT-ST LAURENT J C; BURCKETT-ST LAURENT J C T R; DASQUE B M; DAVIDSON N E; DE BUZZACCARINI F; DEL DUCA V; DENOME F W; DUCA V D; ISOLDI G; TEOPHILE J C; ROGER B L J

PA (LAUR-I) BRUCKETT-ST LAURENT J C T R; (DASQ-I) DASQUE B M; (DAVI-I) DAVIDSON N E; (DBUZ-I) DE BUZZACCARINI F; (DENO-I) DENOME F W; (DUCA-I) DUCA V D; (PROC-C) PROCTER & GAMBLE CO

CYC 93

PI	WO	2001060966	A1	20010823	(200414)*	EN	63[0]	C11D017-04
	MX	2002008065	A1	20030201	(200414)	ES		
	US	20040033921	A1	20040219	(200414)	EN		C11D017-00
	CN	1401030	A	20030305	(200416)	ZH		D06F039-02
	CN	1434857	A	20030806	(200416)	ZH		
	EP	1126070	A1	20010822	(200416)	EN	37[0]	D06F039-02
	EP	1255807	A1	20021113	(200416)	EN		
	AU	2001018076	A	20010827	(200417)	EN		
	BR	2000017112	A	20030114	(200417)	PT		
	EP	1126070	B1	20041110	(200473)	EN		D06F039-02
	DE	60015716	E	20041216	(200482)	DE		D06F039-02
	JP	2005507432	W	20050317	(200520)	JA	104	C11D017-04
	ES	2231148	T3	20050516	(200535)	ES		D06F039-02
	US	20050267005	A1	20051201	(200579)	EN		C11D017-00
	DE	60015716	T2	20051222	(200601)	DE		D06F039-02
	US	20050282725	A1	20051222	(200603)	EN		C11D017-00
	US	6995125	B2	20060207	(200611)	EN		
	AU	2001218076	A8	20051006	(200612)	EN		

ADT WO 2001060966 A1 WO 2000-US32533 20001129; DE 60015716 E DE 2000-60015716 20000609; DE 60015716 T2 DE 2000-60015716 20000609; EP 1126070 A1 EP 2000-870124 20000609; EP 1126070 B1 EP 2000-870124 20000609; DE 60015716 E EP 2000-870124 20000609; ES 2231148 T3 EP 2000-870124 20000609; DE 60015716 T2 EP 2000-870124 20000609; BR 2000017112 A BR 2000-17112 20001129; CN 1434857 A CN 2000-819061 20001129; EP 1255807 A1 EP 2000-980871 20001129; MX 2002008065 A1 WO 2000-US32533 20001129; US 20040033921 A1 WO 2000-US32533 20001129; EP 1255807 A1 WO 2000-US32533 20001129; BR 2000017112 A WO 2000-US32533 20001129; JP 2005507432 W WO 2000-US32533 20001129; US 6995125 B2 WO 2000-US32533 20001129; AU 2001018076 A AU 2001-18076 20001129; JP 2005507432 W JP 2001-560338 20001129; CN 1401030 A CN 2001-805165 20010213; MX 2002008065 A1 MX 2002-8065 20020819; US 20040033921 A1 US 2003-204258 20030514; US 20050267005 A1 Cont of US 2003-204258 20030514; US 20050282725 A1 Cont of US 2003-204258 20030514; US 6995125 B2 US 2003-204258 20030514; US 20050267005 A1 US 2005-192563 20050729; US 20050282725 A1 Cont of US 2005-192563 20050729; US 20050282725 A1 US 2005-212221 20050826; AU 2001218076 A8 AU 2001-218076 20001129

FDT DE 60015716 E Based on EP 1126070 A; ES 2231148 T3 Based on EP 1126070 A; DE 60015716 T2 Based on EP 1126070 A; MX 2002008065 A1 Based on WO 2001060966 A; EP 1255807 A1 Based on WO 2001060966 A; AU 2001018076 A Based on WO 2001060966 A; BR 2000017112 A Based on WO 2001060966 A; JP 2005507432 W Based on WO 2001060966 A; US 6995125 B2 Based on WO 2001060966 A; AU 2001218076 A8 Based on WO 2001060966 A

PRAI WO 2000-US20255 20000725  
EP 2000-870023 20000217  
EP 2000-870124 20000609  
WO 2000-US19619 20000719  
WO 2000-US32533 20001129

IC ICM C11D017-00; C11D017-04; D06F039-02  
ICS C11D003-39; C11D003-395; D06L003-02; D06L003-11

IPCI C11D0017-04 [I,A]; C11D0003-39 [I,A]; C11D0003-395 [I,A]; D06F0039-02 [I,A]

AB WO 2001060966 A1 UPAB: 20060203

NOVELTY - A composition is contained in a water-soluble pouch that comprises at least two compartments. Each compartment contains a different component of the composition. One compartment contains a first component that comprises a liquid matrix and a source of peracid.

USE - The composition is used in laundry processes (claimed) for washing fabrics.

ADVANTAGE - As the source of peracid is either dissolved in a liquid, and/or is in the form of a suspended particle, then the source of peracid is more evenly dispensed from the compartment of the multi-compartment pouch and does not remain in the compartment or give rise to areas of increased bleach activity. The pouch enables the source of peracid and peracid incompatible ingredients to be contained in different compartments to increase the stability of the ingredients during storage and to maintain the performance of the composition contained in the multi-compartment pouch.

TECH ORGANIC CHEMISTRY - Preferred Composition: The source of peracid is in the form of suspended particles and is:

(i) a peracid precursor, preferably tetraacetythylenediamine, nonanol oxy benzene sulfonate and/or nonanol amido caproic oxy benzene sulfonate; and/or

(ii) a preformed peracid, preferably N,N-phthaloylaminoperoxycaproic acid. A second compartment contains a second component that comprises:

(1) a peracid incompatible ingredient, preferably from an enzyme, perfume and/or chelant;

(2) a bleaching ingredient selected from a source of peroxide, bleach booster and/or bleach catalyst; and

(3) a liquid matrix.

The first component comprises a viscous liquid matrix (preferably having a viscosity of at least 300 mPas) and optionally the second component comprises a liquid matrix having a viscosity of less than 300 mPas (preferably less than 25 mPas). Preferably, the first component comprises a non aqueous liquid matrix, and said second component comprises an aqueous liquid matrix.

The first component may also comprise a thickening agent and an effervescence system.

POLYMERS - Preferred Pouch: The pouch is made of a water-soluble material which comprises polyvinyl alcohol.

ABEX EXAMPLE - A detergent composition was prepared in a dual-compartment pouch made from Monosol M8630 (RTM; polyvinyl alcohol water soluble film). A first component of the composition comprised mineral oil (4-15%) as a liquid matrix and N,N-phthaloyl amido peroxy caproic acid (PAP) (2-10%) in the form of particles that were suspended in the mineral oil. A second component was contained in the other compartment of the pouch and contained: - (a) an anionic surfactant (sodium linear 11-13C alkyl benzene sulfonate) (5-20%); - (b) a nonionic surfactant (12-18C predominantly linear primary alcohol condensed with an average of 1-7 moles of ethylene oxide) (5-20%); - (c) a cationic surfactant ( $R_2N+(CH_3)(C_2H_4OH)_2$ , where  $R_2 = 7-12C$ ) (0-5%); - (d) citric acid (0.5-2%); - (e) fatty acid (12-20%); - (f) brightener (disodium 4,4'-bis-(2-sulfostyryl) biphenyl) (0.1-0.4%); - (g) amylase (0-0.4% active enzyme); - (h) cellulase (0.01-0.4% active enzyme); - (i) lipase (0-0.4% active enzyme); - (j) mannanase (0-0.4% active enzyme); - (k) protease (0.01-0.4% active enzyme); - (l) perfume (0-3%); - (m) propanediol (10-20%); and - (n) monoethanolamine (5-20%) and water (0-20%). - Miscellaneous ingredients were added to each component to give 100%.

FS CPI

MC CPI: A12-P06C; A12-W12A; D11-B01A; D11-D02; E06-A01; E06-D03; E06-E01; E10-A04B1C; E10-A04B2C; E10-A09B7; E10-B01C

L26 ANSWER 3 OF 10 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

AN 2002-627218 [67] WPIX

CR 2001-598581; 2002-241568; 2002-268971; 2002-291799; 2002-291800; 2002-291832; 2002-315258; 2002-329348; 2002-329404; 2002-329405; 2002-351439; 2002-557510; 2002-627216; 2002-643358; 2003-167075;

2004-142685; 2004-142686; 2004-375390

DNC C2004-012562 [04]

TI Water-soluble pouch for machine dishwashing, comprises superposed or suppressed compartments each containing **detergent** active or auxiliary components, useful for dispensing these into the pre-wash, main wash and post-rinse cycles

DC A97; D25; E19; Q31; Q32; Q34

IN ALEXANDRE CATLIN T M L; CATLIN M L A; CATLIN T M L; CATLIN T M L A; GILLHAM C R; GILLHAM R; KINLOCH I; KINLOCH J I; KINLOCH J L; KROESE T B W; MAIN A L; MAIN L; MOUSSA B; MOUSSA R B; SMITH D J; SMITH J; VARLEY H; WILLIAM K T B; RUEHL K

PA (CATL-I) ALEXANDRE CATLIN T M L; (CATL-I) CATLIN T M L A; (GILL-I) GILLHAM C R; (KINL-I) KINLOCH J I; (KROE-I) KROESE T B W; (MAIN-I) MAIN A L; (MOUS-I) MOUSSA R B; (PROC-C) PROCTER & GAMBLE CO; (SMIT-I) SMITH D J; (VARL-I) VARLEY H; (WILL-I) WILLIAM K T B

CYC 97

PI WO 2002042408 A2 20020530 (200267)\* EN 61[0]  
 AU 2002039349 A 20020603 (200267) EN  
 US 20020169092 A1 20021114 (200277) EN C11D001-00  
 EP 1337619 A2 20030827 (200357) EN  
 JP 2004514608 W 20040520 (200434) JA 104 B65D030-22  
 CN 1489539 A 20040414 (200442) ZH B65B009-04  
 MX 2003004624 A1 20031001 (200466) ES  
 EP 1484389 A1 20041208 (200480) EN  
 EP 1504994 A2 20050209 (200512) EN  
 EP 1516918 A2 20050323 (200521) EN  
 EP 1337619 B1 20050316 (200522) EN  
 US 20050061703 A1 20050324 (200526) EN B65D085-84  
 US 20050065051 A1 20050324 (200526) EN B65D085-84  
 DE 60109483 E 20050421 (200528) DE C11D017-04  
 ES 2240545 T3 20051016 (200571) ES C11D017-04  
 DE 60109483 T2 20060119 (200612) DE  
 CN 1688480 A 20051026 (200618) ZH B65B009-04  
 EP 1484389 B1 20060510 (200634) EN  
 DE 60119593 E 20060614 (200641) DE

ADT WO 2002042408 A2 WO 2001-US44280 20011127; US 20020169092 A1 Provisional  
 US 2001-265462P 20010131; US 20050061703 A1 Provisional US 2001-265462P  
 20010131; US 20050065051 A1 Provisional US 2001-265462P 20010131; DE  
 60109483 E DE 2001-609483 20011127; DE 60109483 T2 DE 2001-609483  
 20011127; EP 1337619 A2 EP 2001-987100 20011127; EP 1484389 A1 Div Ex EP  
 2001-987100 20011127; EP 1504994 A2 Div Ex EP 2001-987100 20011127; EP  
 1516918 A2 Div Ex EP 2001-987100 20011127; EP 1337619 B1 EP 2001-987100  
 20011127; DE 60109483 E EP 2001-987100 20011127; ES 2240545 T3 EP  
 2001-987100 20011127; DE 60109483 T2 EP 2001-987100 20011127; EP 1484389  
 B1 Div Ex EP 2001-987100 20011127; US 20020169092 A1 US 2001-994533  
 20011127; US 20050061703 A1 Div Ex US 2001-994533 20011127; US 20050065051  
 A1 Div Ex US 2001-994533 20011127; EP 1337619 A2 WO 2001-US44280 20011127;  
 JP 2004514608 W WO 2001-US44280 20011127; MX 2003004624 A1 WO 2001-US44280  
 20011127; EP 1337619 B1 WO 2001-US44280 20011127; DE 60109483 E WO  
 2001-US44280 20011127; DE 60109483 T2 WO 2001-US44280 20011127; AU  
 2002039349 A AU 2002-39349 20011127; JP 2004514608 W JP 2002-545115  
 20011127; CN 1489539 A CN 2002-804410 20020131; CN 1688480 A CN  
 2002-804415 20020131; MX 2003004624 A1 MX 2003-4624 20030526; EP 1484389  
 A1 EP 2004-21614 20011127; EP 1337619 B1 Related to EP 2004-21614  
 20011127; EP 1484389 B1 EP 2004-21614 20011127; EP 1504994 A2 EP  
 2004-25305 20011127; EP 1337619 B1 Related to EP 2004-25305 20011127; EP  
 1516918 A2 EP 2004-30420 20011127; US 20050061703 A1 US 2004-978941  
 20041101; US 20050065051 A1 US 2004-982970 20041105; DE 60119593 E DE  
 2001-619593 20011127; DE 60119593 E EP 2004-21614 20011127

FDT EP 1484389 A1 Div ex EP 1337619 A; EP 1504994 A2 Div ex EP

1337619 A; EP 1516918 A2 Div ex EP 1337619 A; DE 60109483  
 E Based on EP 1337619 A; ES 2240545 T3 Based on EP 1337619  
 A; DE 60109483 T2 Based on EP 1337619 A; EP 1484389 B1 Div  
 ex EP 1337619 A; EP 1337619 B1 Related to EP 1484389 A; EP  
 1337619 B1 Related to EP 1504994 A; AU 2002039349 A Based on  
 WO 2002042408 A; EP 1337619 A2 Based on WO 2002042408 A; JP  
 2004514608 W Based on WO 2002042408 A; MX 2003004624 A1 Based on WO  
 2002042408 A; EP 1337619 B1 Based on WO 2002042408 A; DE 60109483  
 E Based on WO 2002042408 A; DE 60109483 T2 Based on WO 2002042408  
 A; DE 60119593 E Based on EP 1484389 A

PRAI GB 2001-27279 20011114  
 GB 2000-28821 20001127  
 GB 2000-28823 20001127  
 US 2001-265462P 20010131  
 GB 2001-11131 20010505

IC ICM B65B009-04; B65D030-22; B65D085-84; C11D001-00; C11D017-04  
 ICS B65D030-02; B65D077-08; B65D081-00; C11D017-00; C11D003-20;  
 C11D003-30; C11D003-386; C11D003-395; C11D003-43

IPCI B65D0081-00 [I,A]; B65D0081-00 [I,A]; C11D0017-04 [I,A]; C11D0017-04 [I,A]

IPCR B65B0047-00 [I,C]; B65B0047-10 [I,A]; B65B0009-00 [I,C]; B65B0009-04  
 [I,A]; B65D0065-46 [I,A]; B65D0065-46 [I,C]; B65D0081-00 [I,A];  
 B65D0081-00 [I,C]; C11D0011-00 [I,A]; C11D0011-00 [I,C]; C11D0017-00  
 [I,A]; C11D0017-00 [I,C]; C11D0017-04 [I,A]; C11D0017-04 [I,C];  
 C11D0003-22 [I,A]; C11D0003-22 [I,C]; C11D0003-39 [I,A]; C11D0003-39 [I,C]

AB WO 2002042408 A2 UPAB: 20060120

NOVELTY - A water-soluble multi-compartment pouch adapted to fit a  
 dishwasher dispenser and to deliver product into the pre-wash, main wash  
 and post-rinse cycles of a dishwashing machine.

DETAILED DESCRIPTION - A machine dishwashing product is in the form  
 of a water-soluble pouch comprising compartments that are superposed (or  
 in a superposable relationship) each containing 1 or more  
**detergent** active or auxiliary component. The pouch has a volume of  
 5-70 ml. and a longitudinal to transverse aspect ratio of 2:1 to 1:8  
 (preferably 1:1-4). INDEPENDENT CLAIMS are also included for:

(1) manufacture of the pouch, one of which comprises:

(a) forming a moving web of filled and optionally sealed pouches  
 releasably mounted on a moving endless surface;  
 (b) forming a second moving web of filled and sealed pouches  
 releasably mounted on a second moving endless surface;  
 (c) superposing, sealing or securing the webs to form a superposed  
 and sealed web; and

(d) separating the superposed and sealed web into water-soluble  
 multi-compartment pouches;

(2) a method of washing dishware/tableware in an automatic  
 dishwashing using the machine dishwashing product; and

(3) a display pack comprising a preferably see-through container  
 containing several unit-doses in the form of water-soluble pouches in a  
 multiplicity of sensorially distinctive groups.

USE - The pouches are useful for dispensing the **detergent**  
 active or auxiliary components into the pre-wash, main wash and post-rinse  
 cycles of a dishwashing machine.

ADVANTAGE - A measured unitized dose of dishwashing  
**detergent** is delivered, giving precise dosing and avoiding  
 wasteful overdosing or underdosing.

TECH ORGANIC CHEMISTRY - Preferred Compartments: The compartments comprise a  
 powder composition, e.g. a particulate perborate or percarbonate,  
 phthaloyl amido peroxy hexanoic acid, di-acyl peroxide or other organic  
 peracid inclusive of preformed monoperoxy carboxylic acid. Optionally, the  
 compartments comprise a liquid composition comprising e.g. a detergency  
 enzyme, or is in a paste, gel or wax form. Optionally, the compartments

comprise an organic solvent system which can remove cooked, baked or burnt-on soils. The solvent system is an alcohol, amine, ester, glycol ether, glycol, and terpene. The compartments have a different disintegration rate or profile under in-use conditions.

Preferred Components: The pouch comprises upper and lower opposing outer walls, a skirt-like side wall, and 1 or more internal partitioning walls, some or all of which are formed by thermoforming and vacuum forming. One or more internal partitioning wall is secured to an upper or lower outer wall along a first seal line, and the outer wall and partitioning wall are secured to the skirt-like side wall along a second seal line, where the seal lines are at least partially non-overlapping.

ABEX EXAMPLE - 17.2 g. of particulate composition and 4 g. of liquid composition were placed in the two different layered compartments of a PVA rectangular base pouch. The pouch dimensions under a 2 kg. load were 3.7 cm. length, 3.4 cm. width, and 1.5 cm. height, such that its longitudinal to transverse aspect ratio was 1.5:3.2 or 1:2.47. The pouch was manufactured using a two-endless surface process, both moving in continuous horizontal rectilinear motion. A first web of pouches was prepared by forming and filling a moving web of open pouches mounted on an endless surface and closing it with the second web of filled and sealed pouches moving synchronously with it. The particulate composition consisted of 5 wt% tetradecyl dimethyl amine oxide, 5 wt% alkyl-capped non-ionic surfactant comprising a cyclohexyl acetal containing 8 ethylene oxide groups, 55 wt% sodium tripolyphosphate, 1 wt% ethane 1-hydroxy-1,1-diphosphonic acid, 1.5 wt% alpha-amylase, 2 wt% protease, 15 wt% sodium percarbonate, 9 wt% anhydrous sodium carbonate, 6 wt% amorphous sodium silicate, and 0.5 wt% perfume. A liquid composition consisted of 99.5 wt% dipropylene glycol and 0.5 wt% dye.

FS CPI; GMPI

MC CPI: A09-A; A11-B08; A12-P02; D11-A03; D11-A04; D11-B02; D11-B11; D11-D01A; D11-D02; E05-G03; E10-A03B; E10-A04B; E10-A09A; E10-A09B; E10-A22; E10-E04J; E10-E04M; E31-E; E31-K05; E31-K06; E31-P02; E31-P05

L26 ANSWER 4 OF 10 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

AN 2002-173272 [23] WPIX

CR 2002-091602; 2002-124479; 2002-166109; 2002-173271; 2002-181144; 2002-419098

DNC C2002-053815 [23]

DNN N2002-131658 [23]

TI Multi-compartment pouch made from water-soluble film, used for detergent composition for automatic or hand washing applications, comprises an open compartment closed by pre-sealed compartment

DC A97; D25; Q32; Q34

IN GRESSEL G M; GRESSEL M; MANION A; MANION M A; PERKIS K N; PERKIS N; SOMERVILLE ROBERTS N P; SOMERVILLE-ROBERTS N P; SOMERVILLE-ROBERTS P; SOMERVILLE R N P

PA (PROC-C) PROCTER & GAMBLE CO

CYC 94

PI	GB 2361686	A	20011031 (200223)*	EN	51[0]	B65D081-32
	WO 2001085898	A1	20011115 (200223)	EN		C11D017-04
	AU 2001043564	A	20011120 (200224)	EN		C11D017-04
	EP 1276844	A1	20030122 (200308)	EN		C11D017-04
	US 20030050209	A1	20030313 (200321)	EN		C11D017-00
	BR 2001010269	A	20030218 (200323)	PT		C11D017-04
	CN 1426455	A	20030625 (200362)	ZH		C11D017-04
	JP 2003532599	W	20031105 (200377)	JA	31	B65D081-32
	MX 2002010582	A1	20030201 (200413)	ES		B65D065-46
	EP 1276844	B1	20040616 (200439)	EN		C11D017-04
	DE 60103883	E	20040722 (200450)	DE		C11D017-04

ES 2222986 T3 20050216 (200516) ES C11D017-04  
 DE 60103883 T2 20050707 (200545) DE C11D017-04  
 US 6995126 B2 20060207 (200611) EN

ADT GB 2361686 A GB 2000-10229 20000428; AU 2001043564 A AU 2001-43564  
 20010309; BR 2001010269 A BR 2001-10269 20010309; CN 1426455 A CN  
 2001-808713 20010309; DE 60103883 E DE 2001-60103883 20010309; DE 60103883  
 T2 DE 2001-60103883 20010309; EP 1276844 A1 EP 2001-916551 20010309; EP  
 1276844 B1 EP 2001-916551 20010309; DE 60103883 E EP 2001-916551 20010309;  
 ES 2222986 T3 EP 2001-916551 20010309; DE 60103883 T2 EP 2001-916551  
 20010309; JP 2003532599 W JP 2001-582488 20010309; WO 2001085898 A1 WO  
 2001-US7710 20010309; EP 1276844 A1 WO 2001-US7710 20010309; US  
 20030050209 A1 Cont of WO 2001-US7710 20010309; BR 2001010269 A WO  
 2001-US7710 20010309; JP 2003532599 W WO 2001-US7710 20010309; MX  
 2002010582 A1 WO 2001-US7710 20010309; EP 1276844 B1 WO 2001-US7710  
 20010309; DE 60103883 E WO 2001-US7710 20010309; DE 60103883 T2 WO  
 2001-US7710 20010309; US 20030050209 A1 US 2002-279589 20021024; MX  
 2002010582 A1 MX 2002-10582 20021025; US 6995126 B2 Cont of WO 2001-US7710  
 20010309; US 6995126 B2 US 2002-279589 20021024

FDT DE 60103883 E Based on EP 1276844 A; ES 2222986 T3 Based on EP 1276844 A;  
 DE 60103883 T2 Based on EP 1276844 A; AU 2001043564 A Based on WO  
 2001085898 A; EP 1276844 A1 Based on WO 2001085898 A; BR 2001010269 A  
 Based on WO 2001085898 A; JP 2003532599 W Based on WO 2001085898 A; MX  
 2002010582 A1 Based on WO 2001085898 A; EP 1276844 B1 Based on WO  
 2001085898 A; DE 60103883 E Based on WO 2001085898 A; DE 60103883 T2 Based  
 on WO 2001085898 A

PRAI GB 2000-10229 20000428

IC ICM B65D065-46; B65D081-32; C11D017-00; C11D017-04  
 ICS B65D030-02; B65D030-22; B65D077-08; C11D003-37

IPCI C11D0017-04 [I,A]

AB GB 2361686 A UPAB: 20060119  
 NOVELTY - Multi-compartment pouch made of water soluble film, comprises  
 at least two compartments including an open compartment closed by  
 pre-sealed compartment.  
 DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a  
 process for making the multi-compartment pouch  
 comprising closing an open compartment with a pre-sealed compartment.  
 USE - For detergent product such as liquid and solid  
 cleaning compositions for use in automatic or hand washing applications  
 such as pre-treatment, main treatment and/or post-treatment of laundry  
 processing.  
 ADVANTAGE - The multi-compartment water soluble pouch is more  
 stable with reduced risk of ingredients leaking from the seal of pouch  
 during manufacturing and storage of the pouch. The pouch is of convenient  
 size, and provides greater flexibility to vary the amount of composition  
 to the consumer.

TECH ORGANIC CHEMISTRY - Preferred Film: The water soluble film comprises a  
 polyvinyl alcohol polymer.  
 Preferred Pouch: When closing the open compartment with pre-sealed  
 compartment, a seal (II) is formed on pre-sealed compartment containing  
 seal (I), which is in different position to the seal (I). The seal (II)  
 has a greater equivalent diameter than the seal (I) of pre-sealed  
 compartment. The open compartment has a volume space greater than the  
 volume space of pre-sealed compartment. The multi-compartment pouch  
 comprises a composition preferably a detergent composition. The  
 pre-sealed compartment comprises a liquid component and an air bubble.

FS CPI; GMPI  
 MC CPI: A12-P06C; D11-D02

L26 ANSWER 5 OF 10 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
 AN 2001-369845 [39] WPIX



DNC C2001-113579 [39]  
DNN N2001-269993 [39]  
TI **Reusable packing bag for liquid detergent,**  
has two white printing layer which are formed between outer  
layer and intermediate layer and are laminated through adhesive layers  
DC A35; A92; P73; Q32  
IN SHIMOMURA K; TAKAHASHI M; TERASAKI T  
PA (NIPQ-C) DAINIPPON PRINTING CO LTD  
CYC 1  
PI JP 2001071419 A 20010321 (200139)\* JA 4[3] B32B027-00  
ADT JP 2001071419 A JP 1999-249237 19990902  
PRAI JP 1999-249237 19990902  
IC ICM B32B027-00  
ICS B65D030-02  
AB JP 2001071419 A UPAB: 20050525  
NOVELTY - A white printing layer (12) formed in the inner surface of  
outer layer (11) and a white printing layer (14) formed in the outer  
surface of the intermediate layer (15) are laminated through adhesive  
layer (13). A thermobonding resin layer (17) is bonded to the inner  
surface of intermediate layer through adhesive layer (16).  
USE - **Reusable packing bag for liquid detergents**  
  
ADVANTAGE - Improves the concealment property and strength of white  
printing layer by the suitable lamination.  
DESCRIPTION OF DRAWINGS - The figure shows the sectional drawing of  
laminate structure of packing bag.  
Outer layer (11)  
White printing layer (12,14)  
Adhesive layer (13)  
Intermediate layer (15)  
Adhesive layer (16)  
Thermobonding resin layer (17)  
TECH POLYMERS - The intermediate layer of the packing bag contains polyethylene  
terephthalates and nylon.  
FS CPI; GMPI  
MC CPI: A12-P02  
  
L26 ANSWER 6 OF 10 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN  
AN 2000-116334 [10] WPIX  
DNC C2000-035483 [10]  
TI Treatment of textile fabrics for improving and maintaining whiteness of  
fabric  
DC D16; D25; E19  
IN GOEDHART M; JANSSENS J  
PA (HIND-N) HINDUSTAN LEVER LTD; (UNIL-C) UNILEVER NV; (UNIL-C) UNILEVER PLC  
CYC 84  
PI WO 9961572 A1 19991202 (200010)\* EN 41[0] C11D003-39  
AU 9941461 A 19991213 (200020) EN C11D003-39  
BR 9910766 A 20011002 (200167) PT  
ZA 2000006021 A 20011224 (200212) EN 70 C11D000-00  
ADT WO 9961572 A1 WO 1999-EP3587 19990521; AU 9941461 A AU 1999-41461  
19990521; BR 9910766 A BR 1999-10766 19990521; BR 9910766 A WO 1999-EP3587  
19990521; ZA 2000006021 A ZA 2000-6021 20001026  
FDT AU 9941461 A Based on WO 9961572 A; BR 9910766 A Based on WO 9961572 A  
PRAI GB 1999-9439 19990423  
GB 1998-11633 19980529  
IC ICM C11D000-00; C11D003-39  
ICS C11D017-04; C11D003-395; D06L000-00; D06L003-02; D06L003-06  
AB WO 1999061572 A1 UPAB: 20050705  
NOVELTY - The fabric is allowed to soak in an aqueous liquor (i)

comprising a material (ia) capable of converting deposited bluing agent to a colorless **detergent** powder and capable of binding calcium and ferric ions and optionally a surfactant (ib). The fabric is then soaked in an aqueous liquor (ii) comprising a bleach. Finally, the fabric is rinsed in water.

**DETAILED DESCRIPTION** - The fabric is allowed to soak for more than 1 minute, in an aqueous liquor (i) comprising an effective amount of a material (ia) capable of converting deposited bluing agent to a colorless **detergent** powder, a material ((ia) or a different material) capable of binding calcium and ferric ions and optionally a surfactant (ib). The fabric is then soaked for more than 1 minute, in an aqueous liquor (ii) comprising a bleach (iia) and optionally a surfactant (iib), sodium carbonate (iic) and a detergency builder. Finally, the fabric is rinsed in water.

An **INDEPENDENT CLAIM** is also included for a **detergent** powder used for the **treatment** of textile fabric comprising **two** separately **packaged** particulate compositions (i,ii). The particulate composition (i) contains 50-100 weight% of the material (ia) and 0-15 weight% of the surfactant (ib). The particulate composition (ii) comprises 1-100 weight% of the bleach (iia). 0-15 weight% of surfactant (iib), 0-99 weight% of sodium carbonate and/or a filler salt (iic) and 0-50 weight% of detergency builder (iid).

**USE** - Used for improving and maintaining whiteness of fabric.

**ADVANTAGE** - A high level of whiteness can be maintained after many wash cycles. Graying or dulling effect of the fabric is prevented.

**TECH INORGANIC CHEMISTRY** - Preferred Process: The pH of the aqueous liquor (i) is less than 5, preferably 2-5 and it contains optionally an oxidizing agent (ic) capable of masking and/or neutralizing sulfurous odors and a bleach which is stable and effective at a pH below 5. The aqueous liquor (ii) comprises optionally filler salts (iid), bleach stabilizer (iie), a fluorescer (iif) and one or more **detergent** enzymes (iig). The material (ia) is a water soluble solid carboxylic acid such as citric acid preferably having at least 2 carboxyl groups, optionally in admixture with a water soluble salt such as sodium citrate. 1 g/l or more, preferably 3 g/l of material (ia) is present in the aqueous liquor (i). The bleach (iia) is an alkali metal dichlorocyanurate or N,N'-phthaloylaminoperoxycaproic acid. 0.05 g/l, preferably 0.2 g/l of the bleach is present in the aqueous liquor (ii). The fabric is soaked in the aqueous liquor (i) for 1-60 minutes, preferably 10-45 minutes and in the aqueous liquor (ii) for 1-60 minutes, preferably 10-30 minutes. The whole process is performed using hand.

Preferred Product: 1% solution of particulate composition (i) in demineralized water at 25 degreesC, is less than 5, preferably 2-5. The composition (i) contains 0-30 wt.% of the surfactant (ib), 0-10 wt.% of an oxidizing agent (ic) and 0-10 wt.% of the bleach (id). The composition (ii) contains 0-30 wt.% of the surfactant (iid), 0-99 wt.% of alkaline buffer, preferably 0.5-10 wt.% of oxidizing agent selected from alkali metal iodates, 0-5 wt.% of bleach stabilizer, 0-5 wt.% of fluorescer and one or more **detergent** enzymes. The composition (i) contains 0.5-6 wt.% of an alkali metal dichlorocyanurate and the composition (ii) contains **detergent** enzymes such as protease, cellulase and/or their combination. The particulate composition are packaged in sachets or other unit dose form.

**ABEX EXAMPLE** - The fabrics (cotton vests, shirts) to be treated were subjected to 10 wash cycles. 7.5 g of the contents of a sachet of particulate composition (i) containing in (wt.%) citric acid (94.5), nonionic surfactant (5) and lemon perfume (0.5) were dissolved in 1.5 l of water, to obtain an aqueous liquor (A). The pH of the liquor was 2.6-2.7 and the concentration of active ingredients, citric acid was 4.725 g/l. The grayed garments of total weight 250 g were soaked in the aqueous liquor (A) for

15-30 minutes. 7.5 g of a particle composition (ii) were dissolved in 1.5 l of water, to obtain an aqueous liquor (B). The concentration of bleach in the liquor (B) was 0.3 g/l. The garments were then soaked in the liquor (B) for 15 minutes and then rinsed in clean water. The average reflectance values at 460 and 600 nm, before treatment were evaluated and found to be 50.9 and 41.0 (for shirts) and 66.9 and 52.4 (for vests), respectively. The average reflectance values at 460 and 600 nm, after treatment were evaluated and found to be 58.2 and 56.7 (for shirts) and 77.3 and 79.1 (for vests), respectively.

FS CPI

MC CPI: D05-A02; D11-B01A; D11-B01C; D11-B06; E06-D03; E07-D13B; E10-A04B; E10-C02

L26 ANSWER 7 OF 10 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

AN 1998-188064 [17] WPIX

DNC C1998-059761 [17]

DNN N1998-149625 [17]

TI Gusset type packaging bag with fastener for candies and pharmaceutical product, etc. - includes side sealing part and second sealing part which seal both sides of front and back plates, and upper edge portion of notch part by heat application

DC B07; P72; Q32

IN FUJIMORI A; MAZAKI H

PA (NIPQ-C) DAINIPPON PRINTING CO LTD

CYC 1

PI JP 10044261 A 19980217 (199817)\* JA 12[14] B31B001-90

ADT JP 10044261 A JP 1996-219102 19960802

PRAI JP 1996-219102 19960802

IC ICM B31B001-90

ICS B65D030-20; B65D033-25

AB JP 10044261 A UPAB: 20050521

Gusset type packaging bag with fastener for candies, **detergent**, pharmaceutical product, coffee, cocoa and tea includes an outer tucking-in part (41) to both sides of a gusset sleeve by drawing the inner side of an inner tucking-in part (3) to the outside of the gusset sleeve and inverting. A notch part (7) is formed to penetrate a front plate, inner tucking-in part, outer tucking-in part and a back plate and a portion corresponding to the upper edge sealing part of the gusset sleeve. A break part is formed by chiselling the front and back plates from the upper edge to the outside of the outer tucking-in parts. A fastener (9) with an uneven press-fit, is provided individually to the inner surfaces of the front and back plates, opposingly. A side sealing part (10) seals both sides of the front and back plates and a second sealing part (11) seals the upper edge parts of the notch part by application of heat.

USE - For Nori seaweed, rice, foodstuff, snack candy, chocolates, luxury goods, chemical product.

ADVANTAGE - Enables **reusage** of bag for **several** times. Enables to fill **packaging** contents, appropriately.

FS CPI; GMPI

MC CPI: B11-C06

L26 ANSWER 8 OF 10 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

AN 1996-402397 [40] WPIX

DNC C1996-126564 [40]

TI Dispensing system for use with dosing liquid **detergent** - comprising housing and flexible **refill** pouch which has reservoir containing platform for positioning pouch, and contains piercing member

DC F07; Q31; Q34; X27

IN VAN DER HEIJDEN L G; VAN DER HEYDEN L G P

PA (UNIL-C) UNILEVER NV; (UNIL-C) UNILEVER PLC

CYC 67

PI	WO 9626312	A1	19960829 (199640)*	EN	12 [3]	D06F039-02
	AU 9648777	A	19960911 (199651)	EN		D06F039-02
	FI 9703387	A	19970819 (199747)	FI		D06F000-00
	ZA 9601331	A	19971029 (199749)	EN	11	D06F000-00
	EP 815308	A1	19980107 (199806)	EN		D06F039-02
	BR 9604883	A	19980519 (199826)	PT		D06F039-02
	AU 692069	B	19980528 (199833)	EN		D06F039-02
	EP 815308	B1	19990120 (199908)	EN		D06F039-02
	JP 11500689	W	19990119 (199913)	JA	10	B65B069-00
	DE 69601418	E	19990304 (199915)	DE		D06F039-02
	ES 2128160	T3	19990501 (199924)	ES		D06F039-02
	JP 3675831	B2	20050727 (200549)	JA	5	B65B069-00

ADT WO 9626312 A1 WO 1996-EP678 19960214; AU 9648777 A AU 1996-48777 19960214; AU 692069 B AU 1996-48777 19960214; BR 9604883 A BR 1996-4883 19960214; DE 69601418 E DE 1996-69601418 19960214; EP 815308 A1 EP 1996-904811 19960214; EP 815308 B1 EP 1996-904811 19960214; DE 69601418 E EP 1996-904811 19960214; ES 2128160 T3 EP 1996-904811 19960214; JP 11500689 W JP 1996-525383 19960214; JP 3675831 B2 JP 1996-525383 19960214; FI 9703387 A WO 1996-EP678 19960214; EP 815308 A1 WO 1996-EP678 19960214; BR 9604883 A WO 1996-EP678 19960214; EP 815308 B1 WO 1996-EP678 19960214; JP 11500689 W WO 1996-EP678 19960214; DE 69601418 E WO 1996-EP678 19960214; JP 3675831 B2 WO 1996-EP678 19960214; ZA 9601331 A ZA 1996-1331 19960220; FI 9703387 A FI 1997-3387 19970819

FDT AU 692069 B Previous Publ AU 9648777 A; DE 69601418 E Based on EP 815308 A; ES 2128160 T3 Based on EP 815308 A; JP 3675831 B2 Previous Publ JP 11500689 W; AU 9648777 A Based on WO 9626312 A; EP 815308 A1 Based on WO 9626312 A; BR 9604883 A Based on WO 9626312 A; AU 692069 B Based on WO 9626312 A; EP 815308 B1 Based on WO 9626312 A; JP 11500689 W Based on WO 9626312 A; DE 69601418 E Based on WO 9626312 A; JP 3675831 B2 Based on WO 9626312 A

PRAI EP 1995-200395 19950220

IC ICM B65B069-00; D06F000-00; D06F039-02  
ICS B65D083-00

AB WO 1996026312 A1 UPAB: 20060111

A system for dispensing a fluid comprises a housing including a reservoir (2) and a platform (3), a **refillable** flexible **pouch** (1) **disposed** in the reservoir, a piercing member (5) with a blunt knife (6) and retaining hooks (7) and projecting from the bottom part of the reservoir (2) into the reservoir through a platform movable upwards by a spring to compress the pouch from below and a dosing pump connected to the reservoir outlet.

USE - The dispensing system is suitable for use in combination with a dosing pump for dosing the liquid **detergent** prod. into a washing machine.

ADVANTAGE - Offers reduced risk of operator injury.

ABDT WO9626312

A system for dispensing a fluid comprises a housing including a reservoir (2) and a platform (3), a **refillable** flexible **pouch** (1) **disposed** in the reservoir, a piercing member (5) with a blunt knife (6) and retaining hooks (7) and projecting from the bottom part of the reservoir (2) into the reservoir through a platform movable upwards by a spring to compress the pouch from below and a dosing pump connected to the reservoir outlet.

USE

The dispensing system is suitable for use in combination with a dosing pump for dosing the liquid **detergent** prod. into a washing machine.

ADVANTAGE

Offers reduced risk of operator injury.

## PREFERRED SYSTEM

The piercing member contains a blunt knife (6); a platform is spring-loaded ; the piercing member has one or more retaining hooks (7); the reservoir is connected to a pump for dosing the liquid poured into the reservoir from out of a **refill** pouch; and the liquid is **detergent** liquid and the pump is suitable for dosing this liquid into a washing machine.

(SK)

FS CPI; GMPI; EPI

MC CPI: F03-J01

EPI: X27-D01A

L26 ANSWER 9 OF 10 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

AN 1993-387359 [49] WPIX

DNN N1993-299112 [49]

TI **Reusable** packet containing **detergent** - is made from **recycled** plastics material to give long life.

DC Q32; Q34

IN REICH G; REICH S; REICH U

PA (REIC-I) REICH G

CYC 1

PI DE 4216795 A1 19931202 (199349)\* DE 6[12] B65D065-38

ADT DE 4216795 A1 DE 1992-4216795 19920521

PRAI DE 1992-4216795 19920521

IC ICM B65D065-38

ICS B65D006-00

AB DE 4216795 A1 UPAB: 20050510

The packet is especially designed to contain a **detergent**. The packet is made using **recycled** granulated plastics. It is strong and water-resistant. It can subsequently be **recycled** into new **packaging**. It is made in **two** or four kilogram sizes.

The packet may be square or rectangular in plan, and may have a square or rectangular lid connected to one of the top edges by a hinge. There is also a carrying handle. The bottom portion of the packet may be tapered.

USE/ADVANTAGE - Reduced amount of raw materials required for constant supply of packs. Less environmentally harmful **waste**.

FS GMPI

L26 ANSWER 10 OF 10 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

AN 1983-807634 [44] WPIX

DNC C1983-107326 [21]

TI **Two** compartment fabric **treatment bags** - for use in washing machines, containing incompatible components etc.

DC A92; D25; E33; F06

IN DAVIES J F; TUNE J B

PA (UNIL-C) LEVER BROS CO

CYC 2

PI US 4410441 A 19831018 (198344)\* EN 5[2]

CA 1182074 A 19850205 (198510)# EN

ADT US 4410441 A US 1982-371646 19820426; CA 1182074 A CA 1982-402313 19820505  
US 1982-000371646 19820426

IC IC C11D017-00

AB US 4410441 A UPAB: 20050422

Fabric treatment prod. (for use in a washing machine) is a bag with 2 compartments. The bag has: (a) a 1st outer wall formed of an H2O-permeable, H2O-insol. material (I) which bounds the 1st compartment of the bag; (b) a 2nd outer wall formed of an H2O-impermeable, H2O-insol. synth. plastics material (II) which bounds the 2nd compartment of the bag; and (c) an intermediate wall dividing the 2 compartments which is formed of an H2O-permeable, H2O-insol. material (III). 2 compartments may contain

the same or different particulate fabric treatment compsns.  
The prod. may contain 2 entirely separate treatments in one bag (e.g. **detergent** and fabric conditioner), especially those that are not compatible.

FS CPI

MC CPI: A12-P02; A12-S05S; A12-W12A; D11-B11; D11-B15; E31-P02; E31-Q;  
E34-D03; F03-J03; N06-E

=> FILE HCAPL

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FILE LAST UPDATED: 30 Oct 2006 (20061030/ED)

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=> D QUE L18

L6	250130	SEA FILE=HCAPLUS	ABB=ON	POUCH? OR BAG# OR ENVELOP? OR PACKAG?
L7	22896	SEA FILE=HCAPLUS	ABB=ON	L6(4A) (MULTI? OR MANY OR SEVERAL? OR 2 OR TWO OR 3 OR THREE)
L8	292	SEA FILE=HCAPLUS	ABB=ON	L7 AND DETERGENT?/SC,SX,AB,BI
L14	1293	SEA FILE=HCAPLUS	ABB=ON	L7(6A) (RECYC? OR TREAT? OR DISPOS? OR PROCESS?)
L15	16	SEA FILE=HCAPLUS	ABB=ON	L8 AND L14
L16	1	SEA FILE=HCAPLUS	ABB=ON	L15 AND WASTE?/SC,SX,AB,BI
L17	4	SEA FILE=HCAPLUS	ABB=ON	L15 AND DETERGENT?/SC,SX
L18	4	SEA FILE=HCAPLUS	ABB=ON	L16 OR L17

=> FILE RAPRA

FILE 'RAPRA' ENTERED AT 10:00:45 ON 01 NOV 2006

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FILE LAST UPDATED: 24 OCT 2006

<20061024/UP>

FILE COVERS 1972 TO DATE

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>>> [http://www.stn-international.de/stndatabases/details/rapra\\_classcodes.pdf](http://www.stn-international.de/stndatabases/details/rapra_classcodes.pdf)

=> D QUE L30

L6 250130 SEA FILE=HCAPLUS ABB=ON POUCH? OR BAG# OR ENVELOP? OR PACKAG?  
  
L28 2119 SEA FILE=RAPRA ABB=ON L6(4A) (MULTI? OR MANY OR SEVERAL? OR 2  
OR TWO OR 3 OR THREE)  
L29 627 SEA FILE=RAPRA ABB=ON L28 AND (RECYC? OR TREAT? OR PROCESS OR  
DISPOS? OR REUS?)  
L30 6 SEA FILE=RAPRA ABB=ON L29 AND DETERGENT?

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L28 2119 SEA FILE=RAPRA ABB=ON L6(4A) (MULTI? OR MANY OR SEVERAL? OR 2  
OR TWO OR 3 OR THREE)  
L29 627 SEA FILE=RAPRA ABB=ON L28 AND (RECYC? OR TREAT? OR PROCESS OR  
DISPOS? OR REUS?)  
L31 0 SEA FILE=POLLUAB ABB=ON L29 AND DETERGENT?

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=> D QUE L36

L6 250130 SEA FILE=HCAPLUS ABB=ON POUCH? OR BAG# OR ENVELOP? OR PACKAG?  
  
L28 2119 SEA FILE=RAPRA ABB=ON L6(4A) (MULTI? OR MANY OR SEVERAL? OR 2  
OR TWO OR 3 OR THREE)  
L29 627 SEA FILE=RAPRA ABB=ON L28 AND (RECYC? OR TREAT? OR PROCESS OR  
DISPOS? OR REUS?)  
L32 10 SEA FILE=JICST-EPLUS ABB=ON L29 AND DETERGENT?  
L34 13067 SEA FILE=JICST-EPLUS ABB=ON RECYCLE+NT/CT  
L35 16684 SEA FILE=JICST-EPLUS ABB=ON RESOURCE RECYCLING+NT/CT  
L36 2 SEA FILE=JICST-EPLUS ABB=ON L32 AND (L34 OR L35)

=> FILE JAPIO

FILE 'JAPIO' ENTERED AT 10:01:49 ON 01 NOV 2006  
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FILE LAST UPDATED: 23 OCT 2006 <20061023/UP>

FILE COVERS APRIL 1973 TO DECEMBER 22, 2005

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[http://www.stn-international.de/stndatabases/details/ipc\\_reform.html](http://www.stn-international.de/stndatabases/details/ipc_reform.html) <<<

=> D QUE L38  
L6 250130 SEA FILE=HCAPLUS ABB=ON POUCH? OR BAG# OR ENVELOP? OR PACKAG?  
  
L28 2119 SEA FILE=RAPRA ABB=ON L6(4A) (MULTI? OR MANY OR SEVERAL? OR 2  
OR TWO OR 3 OR THREE)  
L29 627 SEA FILE=RAPRA ABB=ON L28 AND (RECYC? OR TREAT? OR PROCESS OR  
DISPOS? OR REUS?)  
L37 7 SEA FILE=JAPIO ABB=ON L29 AND DETERGENT?  
L38 2 SEA FILE=JAPIO ABB=ON L37 AND (RECYC? OR REUS? OR REFILL?)

=> => FILE PASCAL  
FILE 'PASCAL' ENTERED AT 10:07:37 ON 01 NOV 2006  
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FILE LAST UPDATED: 30 OCT 2006 <20061030/UP>  
FILE COVERS 1977 TO DATE.

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IN THE BASIC INDEX (/BI) FIELD <<<

=> D QUE L40  
L6 250130 SEA FILE=HCAPLUS ABB=ON POUCH? OR BAG# OR ENVELOP? OR PACKAG?  
  
L28 2119 SEA FILE=RAPRA ABB=ON L6(4A) (MULTI? OR MANY OR SEVERAL? OR 2  
OR TWO OR 3 OR THREE)  
L29 627 SEA FILE=RAPRA ABB=ON L28 AND (RECYC? OR TREAT? OR PROCESS OR  
DISPOS? OR REUS?)  
L39 10 SEA FILE=PASCAL ABB=ON L29 AND DETERGENT?  
L40 0 SEA FILE=PASCAL ABB=ON L39 AND (RECYC? OR REUS? OR REFILL?)

=> DUP REM L18 L30 L36 L38  
FILE 'HCAPLUS' ENTERED AT 10:08:05 ON 01 NOV 2006  
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FILE 'JICST-EPLUS' ENTERED AT 10:08:05 ON 01 NOV 2006  
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FILE 'JAPIO' ENTERED AT 10:08:05 ON 01 NOV 2006  
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PROCESSING COMPLETED FOR L18  
PROCESSING COMPLETED FOR L30  
PROCESSING COMPLETED FOR L36  
PROCESSING COMPLETED FOR L38

L41 14 DUP REM L18 L30 L36 L38 (0 DUPLICATES REMOVED)



=&gt; D L41 ALL 1-14

L41 ANSWER 1 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN  
 AN 2005:1354737 HCAPLUS  
 DN 144:70885  
 ED Entered STN: 30 Dec 2005  
 TI Production of portioned **detergent** packages made from  
 water-soluble polymer films  
 IN Barthel, Wolfgang; Fileccia, Salvatore; Timmann, Ulf Arno; Nitsch,  
 Christian; Holderbaum, Thomas; Pegelow, Ulrich; Dueffels, Arno; Gentschev,  
 Pavel  
 PA Henkel Kommanditgesellschaft auf Aktien, Germany  
 SO PCT Int. Appl., 83 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA German  
 IC ICM B29C051-02  
 ICS B29C051-04; B29C051-06; B65B003-02; B29C049-02  
 CC 38-3 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 46

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005123368	A1	20051229	WO 2005-EP6179	20050609
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG DE 102004030148 A1 20060119 DE 2004-102004030148 20040622 PRAI DE 2004-102004030148 A 20040622				

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2005123368	ICM	B29C051-02
	ICS	B29C051-04; B29C051-06; B65B003-02; B29C049-02
	IPCI	B29C0051-02 [ICM,7]; B29C0051-04 [ICS,7]; B29C0051-06 [ICS,7]; B29C0051-00 [ICS,7,C*]; B65B0003-02 [ICS,7]; B65B0003-00 [ICS,7,C*]; B29C0049-02 [ICS,7]
DE 102004030148	IPCI	B65B0047-02 [I,A]; B65B0047-00 [I,C*]; B65B0009-04 [I,A]; B65B0009-00 [I,C*]; B65D0065-46 [I,A]; C11D0017-04 [I,A]

AB In the title **process**, giving **two-compartment**  
**packages** holding sep. materials, an H2O-soluble or -dispersible film  
 is heated, molded to give a pocket (preferably deep-drawn), cooled, and  
 molded to enlarge the pocket. The pocket can be filled before, during, or  
 after the cooling.  
 ST **detergent** package water soluble molding; polymer water soluble  
 package **detergent**  
 IT **Detergents**  
 Molding of plastics and rubbers  
 Packaging materials  
 (production of portioned **detergent** packages made from water-soluble

polymer films)  
 IT Plastic films  
 (water-soluble; production of portioned detergent packages made from  
 water-soluble polymer films)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 RE

- (1) Anon; PATENT ABSTRACTS OF JAPAN 1985, V009(080), PM-370
- (2) Hammond, G; WO 0216207 A 2002
- (3) Henkel Kgaa; DE 10244803 A1 2004 HCAPLUS
- (4) Henkel Kgaa; DE 10338370 A1 2005 HCAPLUS
- (5) Kodama Kagaku Kogyo Kk; JP 59209821 A 1984
- (6) Langecker; US 4883630 A 1989
- (7) Minganti, G; WO 2005077642 A 2005 HCAPLUS
- (8) Valyi; US 5941054 A 1999

L41 ANSWER 2 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:36814 HCAPLUS

DN 140:99711

ED Entered STN: 16 Jan 2004

TI Process and bags for cleaning and sterilization of medical fiber products

IN Kyomoto, Muneyuki; Yamada, Morio

PA Dry Cleaning Kyoya Y. K., Japan; Tokom K. K.

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM D06F043-00

ICS A61L002-18; D06F035-00; D06L001-02; B65D030-02

CC 63-8 (Pharmaceuticals)

Section cross-reference(s): 38, 40, 46

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2004008723	A2	20040115	JP 2002-196505	20020603
PRAI JP 2002-196505		20020603		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2004008723	ICM	D06F043-00
	ICS	A61L002-18; D06F035-00; D06L001-02; B65D030-02
	IPCI	D06F0043-00 [ICM,7]; A61L0002-18 [ICS,7]; D06F0035-00 [ICS,7]; D06L0001-02 [ICS,7]; D06L0001-00 [ICS,7,C*]; B65D0030-02 [ICS,7]
	IPCR	D06L0001-00 [I,C*]; D06L0001-02 [I,A]; A61L0002-18 [I,C*]; A61L0002-18 [I,A]; B65D0030-02 [I,C*]; B65D0030-02 [I,A]; D06F0035-00 [I,C*]; D06F0035-00 [I,A]; D06F0043-00 [I,C*]; D06F0043-00 [I,A]
	FTERM	3B155/AA15; 3B155/BA02; 3B155/CC06; 3B155/CD06; 3E064/BA37; 3E064/BC15; 3E064/BC18; 3E064/FA01; 4C058/AA03; 4C058/AA05; 4C058/AA12; 4C058/BB07; 4C058/CC07; 4C058/EE16; 4C058/JJ06; 4C058/JJ07

AB The cleaning process involves inserting medical fiber products which might be contaminated with infectious microorganisms, into bags made from styrene polymer films through openings, sealing the bags, transporting the bags to a dry cleaning apparatus, placing them into the dry cleaning apparatus, and dissolving the styrene polymer films with tetrachloroethylene (PCE) for sterilization and washing of the medical fiber products. A blown film formed from a composition containing G 200C (styrene homopolymer) 45, E 640 (high-impact polystyrene) 35, and Tuftec H 1081 (SEBS) 20 parts showed

tensile strength 13.7 and 10.4 N in the machine direction (MD) and transverse direction (TD), resp., elongation 113 and 222% in MD and TD, resp., tear strength 0.09 N in both directions, and water resistance (JIS L 1092)  $\geq 200$  cm. Fabrics (sheepskin, blanket, carpet, and curtain) contaminated with blood were placed in bags, sep., the bags were sealed, placed in a dry cleaning apparatus, and cleaned with a cleaning solvent composition containing 200 L Asahi Perchlor (PCE), 700 mL Persa P-3 (PCE), and 700 mL aqueous 35% H2O2 solution. Staphylococcus aureus was effectively controlled in the process.

ST polystyrene film bag medical fabric cleaning; ethylene tetrachloride medical fabric sterilization polystyrene bag

IT Household furnishings  
(bedding; process and polystyrene bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

IT Household furnishings  
(blankets; process and polystyrene bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

IT Household furnishings  
(curtains; process and polystyrene bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

IT Medical goods  
(fabrics; process and polystyrene bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

IT Isoprene-styrene rubber  
RL: TEM (Technical or engineered material use); USES (Uses)  
(hydrogenated, block, triblock, Septon 2004; process and polystyrene bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

IT Styrene-butadiene rubber, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(hydrogenated, block, triblock, Tuftec H 1081; process and polystyrene bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

IT Impact-resistant materials  
(polystyrene; process and polystyrene bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

IT Bags  
Carpets  
Dry cleaning  
Dry cleaning solvents  
Sterilization and Disinfection  
Washing  
(process and polystyrene bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

IT Polyolefin rubber  
Thermoplastic rubber  
RL: TEM (Technical or engineered material use); USES (Uses)  
(process and polystyrene bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

IT Hide  
(sheepskin; process and polystyrene bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

IT Plastic films  
(styrene polymers, bags; process and polystyrene bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

IT 127-18-4, Tetrachloroethylene, uses  
RL: NUU (Other use, unclassified); USES (Uses)  
(Asahi Perchlor, Persa P 3; process and polystyrene

bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

IT 9003-53-6, Polystyrene  
RL: TEM (Technical or engineered material use); USES (Uses)  
(G 200C; process and polystyrene bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

IT 457059-94-8, E 640  
RL: TEM (Technical or engineered material use); USES (Uses)  
(impact-resistant polystyrene; process and polystyrene bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

IT 105729-79-1 700836-36-8  
RL: TEM (Technical or engineered material use); USES (Uses)  
(isoprene-styrene rubber, hydrogenated, block, triblock, Septon 2004; process and polystyrene bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

IT 100-42-5D, Styrene, polymers  
RL: TEM (Technical or engineered material use); USES (Uses)  
(process and polystyrene bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

IT 106107-54-4 694491-73-1  
RL: TEM (Technical or engineered material use); USES (Uses)  
(styrene-butadiene rubber, hydrogenated, block, triblock, Tuftec H 1081; process and polystyrene bags for cleaning and sterilization of medical fiber products with tetrachloroethylene)

L41 ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN  
AN 2004:796356 HCAPLUS  
DN 141:297691  
ED Entered STN: 30 Sep 2004  
TI Process for recycling detergent pouches  
IN Kinloch, James Iain; Smith, David John; Vega, Jose Luis  
PA The Procter & Gamble Company, USA  
SO Eur. Pat. Appl., 9 pp.  
CODEN: EPXXDW  
DT Patent  
LA English  
IC ICM C11D017-04  
ICS B65D065-46; C08J011-08; B29B017-02; B29B017-00  
CC 46-5 (Surface Active Agents and Detergents)  
FAN.CNT 1

*applicant*

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1462513	A1	20040929	EP 2003-251842	20030324
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2004192793	A1	20040930	US 2004-805035	20040319
CA 2518492	AA	20041007	CA 2004-2518492	20040324
WO 2004085601	A1	20041007	WO 2004-US9046	20040324
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRAI EP 2003-251842 A 20030324  
 WO 2004-US9046 W 20040324

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1462513	ICM	C11D017-04
	ICS	B65D065-46; C08J011-08; B29B017-02; B29B017-00
	IPCI	C11D0017-04 [ICM,7]; B65D0065-46 [ICS,7]; C08J0011-08 [ICS,7]; C08J0011-00 [ICS,7,C*]; B29B0017-02 [ICS,7]; B29B0017-00 [ICS,7]
	IPCR	B29B0017-00 [I,C*]; B29B0017-00 [I,A]; B29B0017-02 [I,C*]; B29B0017-02 [I,A]; C08J0011-00 [I,C*]; C08J0011-08 [I,A]; C11D0017-04 [I,C*]; C11D0017-04 [I,A]
US 2004192793	ECLA	B29B017/00B; B29B017/02; C08J011/08; C11D017/04B
	IPCI	C11D0001-00 [ICM,7]
	IPCR	C08J0011-00 [I,C*]; C08J0011-08 [I,A]; C11D0017-04 [I,A]; C11D0017-04 [I,C*]
	NCL	521/040.500
CA 2518492	ECLA	B29B017/00B; B29B017/02; C08J011/08; C11D017/04B
	IPCI	C11D0017-04 [ICM,7]; B29B0017-00 [ICS,7]; B29B0017-02 [ICS,7]; C08J0011-08 [ICS,7]; C08J0011-00 [ICS,7,C*]; B65D0065-46 [ICS,7]
	IPCR	B29B0017-00 [I,C*]; B29B0017-00 [I,A]; B29B0017-02 [I,C*]; B29B0017-02 [I,A]; C08J0011-00 [I,C*]; C08J0011-08 [I,A]; C11D0017-04 [I,C*]; C11D0017-04 [I,A]
WO 2004085601	ECLA	B29B017/00B; B29B017/02; C08J011/08; C11D017/04B
	IPCI	C11D0017-04 [ICM,7]; B65D0065-46 [ICS,7]; C08J0011-08 [ICS,7]; C08J0011-00 [ICS,7,C*]; B29B0017-02 [ICS,7]; B29B0017-00 [ICS,7]
	IPCR	B29B0017-00 [I,C*]; B29B0017-00 [I,A]; B29B0017-02 [I,C*]; B29B0017-02 [I,A]; C08J0011-00 [I,C*]; C08J0011-08 [I,A]; C11D0017-04 [I,C*]; C11D0017-04 [I,A]
	ECLA	B29B017/00B; B29B017/02; C08J011/08; C11D017/04B

AB A process for treating or recycling a waste single or multicompartment detergent pouch containing one or more detergent or detergent auxiliary compns. enclosed within a water-soluble enveloping material comprises the steps of (a) introducing the waste pouch into a mixing chamber, (b) adding a solvent or other solubilizing agent into the mixing chamber in an amount sufficient to at least partially dissolve the enveloping material, (c) subjecting the mixture to mech. mixing to form a slurry, and (d) converting the resulting slurry to a solid or semisolid form. Thus, 17.2 g of a particulate composition and 4 g of a liquid composition were placed into two different compartments of a dual compartment pouch made from a PVA film (Monosol M 8630). The pouches (30,000) and 1,800 L of distilled water were introduced into a dryer at 70°, the mixture was converted into a slurry, the slurry was dried and granulated, followed by separation through a 850 µm vibrating sieve. The powder which did not pass through the sieve was ground and blended with the previously separated fraction. The resulting powder was blended with the initial detergent composition and used to manufacture multicompartment pouches.

ST water soluble polymer envelope detergent pouch recycling

IT Containers  
 (envelopes; process for recycling detergent pouches)

IT Wastes  
 (industrial; process for recycling detergent pouches)

IT **Detergents**  
 (laundry; process for recycling **detergent** pouches)

IT Bleaching agents  
 Packaging materials  
 Recycling  
 Solubilizers  
 Solvents  
 (process for recycling **detergent** pouches)

IT Peroxides, processes  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
 (process for recycling **detergent** pouches)

IT Amines, uses  
 RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
 (process for recycling **detergent** pouches)

IT Polymers, processes  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); REM (Removal or disposal); PROC (Process)  
 (water-soluble; process for recycling **detergent** pouches)

IT 888727-31-9, Monosol M 8630  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); REM (Removal or disposal); PROC (Process)  
 (process for recycling **detergent** pouches)

IT 497-19-8, Sodium carbonate, uses 1344-09-8, Sodium silicate 3332-27-2, Tetradecyldimethylamine oxide 7758-29-4, Sodium tripolyphosphate 15630-89-4, Sodium percarbonate 34590-94-8, Dipropylene glycol methyl ether  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
 (process for recycling **detergent** pouches)

L41 ANSWER 4 OF 14 RAPRA COPYRIGHT 2006 RAPRA on STN  
 AN R:885216 RAPRA FS Rapra Abstracts  
 TI PET AND C-PP GET CLEAR NOD FOR **DETERGENT** PACKAGING.  
 AU Defosse M  
 SO Modern Plastics International 33, No.4, April 2003, p.36  
 ISSN: 0026-8283  
 CODEN: MOPLAY

PY 2003  
 DT Journal  
 LA English

AB For over two decades, HDPE and PVC have been the materials of choice for nearly all household **detergent** and cleanser **packaging**. However, **many detergent** suppliers, even those of lower-cost brands, are now specifying PETP and clarified PP for their packaging. PETP and, to a lesser degree, C-PP offer higher transparency and gloss than HDPE. Significantly, cost differences between the incumbent materials and the challengers have shrunk, especially with PETP. Owens-Illinois Plastics invested 6m pounds sterling last year to increase capacity for injection SBM household-cleaner bottles in the UK. Late last year, Inblow Form, Wrexham, Wales, began processing 750-ml and 1-L C-PP handleware bottles for a surface cleaner. The company uses Uniloy Milacron EBM machinery modified for C-PP processing.

CC 43C112; 42C12; 6P21; 832  
 SC \*QO; KQ; KE; SD  
 CT BLOW MOLDING; BLOW MOULDING; CAPACITY; CLARIFYING AGENT; CLARITY; CLOSURE; COMPANIES; COMPANY; COST; COSTS; **DETERGENT**; ETHYLENE

POLYMER; EXTRUSION; EXTRUSION BLOW MOLDING; EXTRUSION BLOW MOULDING; FINANCE; GLOSS; HDPE; HIGH DENSITY POLYETHYLENE; HOUSEHOLD CHEMICALS; INVESTMENT; MACHINE; MACHINERY; MATERIAL REPLACEMENT; MATERIALS SUBSTITUTION; OUTPUT; PACKAGING; PETP; PET; PLASTIC; POLYETHYLENE; POLYETHYLENE TEREPHTHALATE; POLYPROPENE; POLYPROPYLENE; POLYVINYL CHLORIDE; PP; PRODUCTION CAPACITY; PVC; **RECYCLABLE**; THERMOPLASTIC

SHR BLOW MOULDING, PETP, PP, bottles; BOTTLES, PETP, PP, blow moulding, household chemicals; ETHYLENE TEREPHTHALATE POLYMERS, bottles, blow moulding; PROPYLENE POLYMERS, clarified, bottles, blow moulding

GT WORLD

L41 ANSWER 5 OF 14 JICST-EPlus COPYRIGHT 2006 JST on STN  
 AN 990922628 JICST-EPlus  
 TI Toiletry Packaging in Europe.  
 AU YOSHIKAWA KIYOSHI  
 CS Raion'enjinieringu  
 SO Hosoo Gijutsu (JPI Journal), (1999) vol. 37, no. 9, pp. 765-769. Journal Code: G0839A (Fig. 12)  
 ISSN: 0385-728X  
 CY Japan  
 DT Journal; Commentary  
 LA Japanese  
 STA New  
 AB We inspected the contemporary toiletry packaging in Germany, a country with advanced environmental protection and **recycling** systems. At the INTERPACK exhibition, the diversity of glass bottles and the wide range of PP and PET applications drew our attention. Contrary to what we imagined, PVC has regained its popularity. In the aspect of packaging machines, high-speed operation is the major function machine manufacturers are racing to incorporate into their products to provide economical advantage. In addition, improvements in double-speed operation, safety, and operability are under way. In a hypermarket, we noticed that many products in powder form are packaged in bags. However, we did not see as many liquid products packaged in **pouches** as we expected. The challenge in the future will be to develop packaging styles and materials that are both costeffective and environment-friendly. (author abst.)

CC QE02010B (621.798)  
 CT medical device; cosmetic; medicament packaging; **recycle**; Germany; polyvinyl chloride; plastic pouch; tube packaging; filling machine(package); **detergent**; tooth paste; heat sealing; laser heating; packaging industry; commercial packaging

BT product; perfumery and cosmetics; packaging; **reuse**; utilization; Europe; chlorine-containing polymer; halogen-containing polymer; polymer; thermoplastic; plastic; bag; container; plastic container; inner packaging machine; packaging machinery; machinery; cleaning agent; miscellaneous goods; home care dental device; dental equipment; medical equipment; sealing(melt); seal; closing(airtightness); heating; laser application; industry

ST toiletries; standing pouch

L41 ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN  
 AN 1998:602969 HCAPLUS  
 DN 129:218302  
 ED Entered STN: 23 Sep 1998  
 TI Aqueous cleaning compositions containing two reactive components especially for shower gels from lather  
 IN Hall, Christopher John  
 PA Cussons (International) Ltd., UK

SO U.S., 4 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC C11D017-00; C11D017-08; C11D007-50; B65D085-84  
 INCL 510406000  
 CC 46-6 (Surface Active Agents and Detergents)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5804546	A	19980908	US 1996-652370	19960523
	AU 9652470	A1	19961205	AU 1996-52470	19960524
	AU 695733	B2	19980820		
	EP 745665	A2	19961204	EP 1996-303793	19960528
	EP 745665	A3	19980513		
	EP 745665	B1	20010425		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, SI, LT, LV, FI				
	AT 200795	E	20010515	AT 1996-303793	19960528
	GR 3036259	T3	20011031	GR 2001-401108	20010724
PRAI	GB 1995-10856	A	19950527		

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 5804546	IC	C11D017-00; C11D017-08; C11D007-50; B65D085-84
	INCL	510406000
	IPCI	C11D0017-00; C11D0017-08; C11D0007-50; B65D0085-84
	IPCR	B05B0011-00 [I,C*]; B05B0011-00 [I,A]; B65D0081-32 [I,C*]; B65D0081-32 [I,A]; C11D0003-00 [I,C*]; C11D0003-00 [I,A]; C11D0007-02 [I,C*]; C11D0007-08 [I,A]; C11D0007-12 [I,A]; C11D0007-22 [I,C*]; C11D0007-26 [I,A]; C11D0017-04 [I,C*]; C11D0017-04 [I,A]
	NCL	510/406.000; 206/524.100; 206/524.200; 206/524.300; 510/135.000; 510/140.000; 510/159.000
	ECLA	B05B011/00P11; B65D081/32L; C11D007/08; C11D007/12; C11D007/26E; C11D017/04B
AU 9652470	IPCI	C11D0003-10 [ICM,6]; C11D0003-20 [ICS,6]; C11D0017-00 [ICS,6]; A61K0007-50 [ICS,6]
	IPCR	B05B0011-00 [I,C*]; B05B0011-00 [I,A]; B65D0081-32 [I,C*]; B65D0081-32 [I,A]; C11D0003-00 [I,C*]; C11D0003-00 [I,A]; C11D0007-02 [I,C*]; C11D0007-08 [I,A]; C11D0007-12 [I,A]; C11D0007-22 [I,C*]; C11D0007-26 [I,A]; C11D0017-04 [I,C*]; C11D0017-04 [I,A]
EP 745665	IPCI	C11D0017-04 [ICM,6]; C11D0003-00 [ICS,6]; B65D0081-32 [ICS,6]
	IPCR	B05B0011-00 [I,C*]; B05B0011-00 [I,A]; B65D0081-32 [I,C*]; B65D0081-32 [I,A]; C11D0003-00 [I,C*]; C11D0003-00 [I,A]; C11D0007-02 [I,C*]; C11D0007-08 [I,A]; C11D0007-12 [I,A]; C11D0007-22 [I,C*]; C11D0007-26 [I,A]; C11D0017-04 [I,C*]; C11D0017-04 [I,A]
	ECLA	B05B011/00P11; C11D003/00B10; C11D007/26E; C11D017/04B
AT 200795	IPCI	C11D0017-04 [ICM,7]; C11D0003-00 [ICS,7]; B65D0081-32 [ICS,7]
	IPCR	B05B0011-00 [I,C*]; B05B0011-00 [I,A]; B65D0081-32 [I,C*]; B65D0081-32 [I,A]; C11D0003-00 [I,C*]; C11D0003-00 [I,A]; C11D0007-02 [I,C*]; C11D0007-08 [I,A]; C11D0007-12 [I,A]; C11D0007-22 [I,C*];



C11D0007-26 [I,A]; C11D0017-04 [I,C\*]; C11D0017-04 [I,A]

GR 3036259 IPCI C11D0017-04 [ICM,7]  
 IPCR B05B0011-00 [I,C\*]; B05B0011-00 [I,A]; B65D0081-32 [I,C\*]; B65D0081-32 [I,A]; C11D0003-00 [I,C\*]; C11D0003-00 [I,A]; C11D0007-02 [I,C\*]; C11D0007-08 [I,A]; C11D0007-12 [I,A]; C11D0007-22 [I,C\*]; C11D0007-26 [I,A]; C11D0017-04 [I,C\*]; C11D0017-04 [I,A]

AB A cleaning composition consists of a surfactant and two components such as an acid and a carbonate or bicarbonate, whereby when the two components are mixed together a gas is generated which acts on the surfactant to create a lather. The composition is **disposed** in a **package** having **two** containers for each component. Thus, a two-component cleaning composition comprising (1) acid component containing citric acid 30, hydroxypropyl guar hydroxypropyltrimonium chloride 4 and H2O 66%, and (2) alkali component containing sodium bicarbonate 5, sodium lauryl ether sulfate 16.8, cocamidopropyl betaine 1.5 amine oxide 1, coconut diethanolamide 3 and H2O 72.7%, were charged into sep. compartment within a container.

ST shower gel aq cleaning compn; acid carbonate reaction carbon oxide release; sep container two component cleaning compn; citric acid sodium bicarbonate cleaning compn

IT Surfactants  
 (aqueous cleaning compns. containing two reactive components especially for shower gels from lather)

IT Acids, uses  
 Bicarbonates  
 Carbonates, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (aqueous cleaning compns. containing two reactive components especially for shower gels from lather)

IT **Detergents**  
 (shower gel; aqueous cleaning compns. containing two reactive components especially for shower gels from lather)

IT 12795-06-1P, Carbon oxide  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (aqueous cleaning compns. containing two reactive components especially for shower gels from lather)

IT 77-92-9, Citric acid, uses 144-55-8, Sodium bicarbonate, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (aqueous cleaning compns. containing two reactive components especially for shower gels from lather)

IT 9004-82-4, Sodium lauryl ether sulfate  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (surfactant; aqueous cleaning compns. containing two reactive components especially for shower gels from lather)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 RE  
 (1) Prussin; US 3708431 1973 HCAPLUS

L41 ANSWER 7 OF 14 JICST-EPlus COPYRIGHT 2006 JST on STN  
 AN 980990871 JICST-EPlus

TI Recent technical trends on household packaging.  
 AU TSUJII NORIHIRO  
 CS Lion Corp.  
 SO Fragr J, (1998) vol. 26, no. 10, pp. 43-48. Journal Code: G0987B (Fig. 10, Tbl. 1)  
 CODEN: FUJAD7; ISSN: 0288-9803  
 CY Japan  
 DT Journal; Commentary  
 LA Japanese  
 STA New  
 AB Describes recent technical trends on household packaging of laundry **detergent**, kitchen **detergents** and so on. The social requirements for packaging and Lion's progress to meet the requirements are described as below using our case that I have been in charge of. 1. Focus on Japanese **recycling** law, resource saving, easy to **treat**, advantages of **recycled** materials, and post-pvc. 2. Improvement of **packaging** design and explanations to prevent misuse by senior aged and for the coming aged society. 3. Improvement of usage for the product's differentiation: New trigger container. (author abst.)  
 CC YG02010P; YG03010W (661.185.6+661.187; 665.5)  
 CT packaging container; plastic; **detergent**; resource conservation; **resource recycling**; **reuse**; plastic pouch; plastic container; technological review; household utensils  
 BT container; cleaning agent; saving; regeneration; utilization; bag; review  
  
 L41 ANSWER 8 OF 14 RAPRA COPYRIGHT 2006 RAPRA on STN  
 AN R:656074 RAPRA FS Rapra Abstracts  
 TI **MULTILAYER MATERIALS FOR MAKING PACKAGES.**  
 IN Kaczun J; Hiery E; Tercalavres C  
 PA Procter & Gamble Co.; BASF AG  
 CA Cincinnati, Ohio 45202, USA  
 Postcode: OH 45202  
 PI EP 802045 A1 19971022  
 DS AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; NL; PT; SE  
 AI EP 1996-870049 19960415  
 DT Patent  
 LA English  
 IC ICM B32B027-32  
 ICS C08J007-04; B65D065-40  
 AB These comprise at least one layer of a polyolefin-based material and a perfume barrier layer, which consists of a one-component lacquer. They may be used to make packages, such as stand-up refill pouches, which are suitable for containing an odouriferous composition, such as fabric and/or household **treatment** compositions.  
 CC 42C1; 626; 6P  
 SC \*QO; OK; KE  
 CT ALKENE POLYMER; BARRIER LAYER; CLEANING AGENT; COATING; COMPANIES; COMPANY; **DETERGENT**; DIAGRAM; ETHYLENE POLYMER; HDPE; HIGH DENSITY POLYETHYLENE; LACQUER; LAMINATE; LDPE; LLDPE; LOW DENSITY POLYETHYLENE; MULTI-LAYER; MULTILAYER; OLEFIN POLYMER; PACKAGING; PERFUME; PLASTIC; POLYALKENE; POLYETHYLENE; POLYOLEFIN; POUCH; REFILLABLE; TECHNICAL; THERMOPLASTIC  
 SHR PACKAGING, laminates, olefin polymers; OLEFIN POLYMERS, packaging, laminates; LAMINATES, olefin polymers, packaging  
 GT EUROPEAN COMMUNITY; EUROPEAN UNION; GERMANY; USA; WESTERN EUROPE  
  
 L41 ANSWER 9 OF 14 RAPRA COPYRIGHT 2006 RAPRA on STN  
 AN R:591043 RAPRA FS Rapra Abstracts  
 TI **MULTILAYER MATERIALS FOR MAKING PACKAGES.**

IN Moss G M; Tschabunin H; Kaczun J; Honert J  
 PA Procter & Gamble Co.; BASF AG; Kobusch Folien GmbH  
 CA Cincinnati, Ohio 45202, USA  
 Postcode: 45202  
 PI EP 707956 A1 19960424  
 DS AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; NL; PT; SE  
 AI EP 1994-870159 19941013  
 DT Patent  
 LA English  
 IC ICM B32B027-32  
 AB These **recyclable** materials comprise at least a layer of polyolefin-based material, less than 25 weight% of post-consumer **recycled** plastic and a perfume barrier layer comprising a lacquer. They prevent migration of odouriferous compounds, such as perfume, through the walls of a package, which is suitable for containing dry or liquid odouriferous products, such as **detergent** compositions.  
 CC 6P; 9351  
 SC \*QQ; UE  
 CT BARRIER LAYER; BARRIER PROPERTIES; COMPANY; **DETERGENT**; LACQUER; LAMINATE; MULTILAYER; ODOUR SUPPRESSION; PACKAGING; PERFUME; PLASTIC; POLYOLEFIN; POST-CONSUMER; **RECYCLABLE**; SCRAP POLYMER; TECHNICAL; THERMOPLASTIC  
 SHR PACKAGING, barrier properties; BARRIER PROPERTIES, packaging  
 GT EUROPEAN COMMUNITY; EUROPEAN UNION; GERMANY; USA; WESTERN EUROPE

L41 ANSWER 10 OF 14 RAPRA COPYRIGHT 2006 RAPRA on STN  
 AN R:698328 RAPRA FS Rapra Abstracts  
 TI MULTILAYER ANNULAR FLOW OF A **RECYCLED**/VIRGIN MATERIAL COMBINATION.  
 AU DiRaddo R W; Dube F A; Garcia-Rejon A  
 CS Canada, National Research Council  
 SO Enercomp '95 International Conference on Composite Materials and Energy. Conference proceedings  
 Editor(s): Canadian Association for Composite Structures & Materials  
 Montreal, Canada, 8th-10th May 1995, p.432-8. 627-63Ene  
 PY 1995  
 DT Conference Article  
 LA English  
 AB One processing alternative for the use of **recycled** polymer feedstocks is multilayer extrusion. This option allows the masking of inferior properties of a **recycled** feedstock as an inner layer, while employing a virgin material as the outer layer. Coextrusion blow moulding is one processing alternative that is increasing in importance with regard to **recycled** polymer feedstocks. Several manufacturers are employing an inner layer of **recycled** materials in containers, such as motor oil bottles and **detergent packaging**. The **multilayer** flow resulting from the coextrusion through an annular die is the primary stage of the coextrusion blow moulding **process**. The results of this stage affect the remaining phases: inflation, cooling and solidification. An attempt is made to obtain a better understanding of flow behaviour, especially swell dynamics, of a virgin/**recycled** material combination. Emphasis is placed on experimental results; however, some theoretical predictions based on viscoelastic models are presented.  
 CC 62.15; 832  
 SC \*QQ; SD  
 CT BLOW MOLDING; BLOW MOULDING; COMPANIES; COMPANY; DATA; DIE SWELL; ELASTIC PROPERTIES; EQUATION; EXTRUSION; EXTRUSION BLOW MOLDING; EXTRUSION BLOW MOULDING; GRAPH; MATHEMATICAL MODEL; MULTI-LAYER; MULTILAYER; PARISON;

PLASTIC; RECLAIM; **RECYCLING**; SCRAP POLYMER; SIMULATION;  
 SWELLING; TECHNICAL; THERMOPLASTIC; THERMOSET; VIRGIN POLYMER;  
 VISCOELASTIC; VISCOELASTIC PROPERTIES; VISCOELASTICITY  
 SHR BLOW MOULDING, coextrusion, scrap polymers; SCRAP POLYMERS, coextrusion  
 blow moulding, coextrusion  
 GT CANADA

L41 ANSWER 11 OF 14 RAPRA COPYRIGHT 2006 RAPRA on STN  
 AN R:556667 RAPRA FS Rapra Abstracts  
 TI WRAPPED IN REDUCTION.  
 AU Buckley N  
 SO Financial Times No.32737, 26th July 1995, p.12  
 ISSN: 0174-7363  
 PY 1995  
 DT Journal  
 LA English  
 AB The amount of packaging used for products has sharply decreased in recent years. Incpen says typical packs and wrappers are 50% lighter than two decades ago. Cutting the amount of material used in **packaging** has **several** benefits. These include a reduction in the amount of raw material required, less energy is required to make the packaging and to transport it, and costs are reduced to recover and **process** the packaging material after use. Laminates and coatings have been an important area of progress. Here, lighter and stronger packaging is developed by creating sandwiches of different materials. Lawson Mardon has developed a collapsible bottle 50% lighter than those being used for household chemicals and health and beauty products, which folds flat for easier handling when empty.

CC 6P  
 SC \*QO  
 CT BOTTLE; COATING; COLLAPSIBLE; COMPANY; CONSUMPTION; COST; DATA; **DETERGENT**; ECONOMIC INFORMATION; ENERGY CONSUMPTION; FILM; FOOD PACKAGING; GRAPH; LAMINATE; PACKAGING; PETP; PLASTIC; POLYETHYLENE TEREPHTHALATE; POLYPROPYLENE; PP; RAW MATERIAL; **RECYCLING**; SOURCE REDUCTION; STATISTICS; THERMOPLASTIC; WEIGHT REDUCTION; PET  
 SHR PACKAGING,source reduction  
 GT WESTERN EUROPE-GENERAL; WESTERN EUROPE

L41 ANSWER 12 OF 14 JAPIO (C) 2006 JPO on STN  
 AN 1994-048466 JAPIO  
 TI LIQUID FEED CONTAINER  
 IN FURUTA KATSUJI  
 PA DAIWA GRAVURE KK  
 PI JP 06048466 A 19940222 Heisei  
 AI JP 1992-194389 (JP04194389 Heisei) 19920722  
 PRAI JP 1992-194389 19920722  
 SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1994  
 IC ICM B65D077-06  
 ICS B65D047-34; B65D083-76  
 AB PURPOSE: To provide a liquid feed container which obtain the need for any operation to **refill** the container with the liquid such as **detergent** by replacing with the liquid in its original bag.  
 CONSTITUTION: The liquid feed container is provided with a raised part engageable with a hole part partially formed in the peripheral heat sealing part of a stand pack type bag 1 filled with liquid such as **detergent** and set upside down in the container, a freely detachable pump member 8 with a nozzle 10 for performing liquid feed function at the top opening of the container and a suction tube 9 which is extended in a self-standing position downwardly from the pump member 8 with its end piercing the bottom part 3 of the **bag** 1

disposed in the upper part of the container and through which the liquid is sent up by the up and down motion of the pump member 8 provided in the opening of the container 5, thereby feeding the liquid from the nozzle 10.

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L41 ANSWER 13 OF 14 RAPRA COPYRIGHT 2006 RAPRA on STN  
 AN R:450511 RAPRA FS Rapra Abstracts  
 TI ENVIRONMENT TRENDS IN NEW PRODUCT LAUNCHES.  
 SO Plastics and Rubber Weekly No.1434,9th May 1992,p.8  
 ISSN: 0032-1168  
 PY 1992  
 DT Journal  
 LA English  
 AB Examples of the use of **recycled** plastics in packaging applications are described, with the main example being the use of post-consumer reclaim sandwiched between 2 layers of PE, designed by CMB Bottles & Speciality Closures for Procter & Gamble's 500ml Ariel Ultra washing liquid pack. It contains a minimum of 25% reclaimed material. Other examples include a photodegradable form of ring **multi-packaging** systems for cans and bottles from ITW Hi-Cone and a **recycled** PP strap manufactured by P.P.Payne.  
 CC 6P; 8.13  
 SC \*SN; QO  
 CT APPLICATION; BLOW MOULD; BLOW MOULDING; BOTTLE; COEXTRUSION; COMMERCIAL INFORMATION; COMPANIES; COMPANY; COMPUTER AIDED DESIGN; DATA; **DETERGENT**; ENVIRONMENT; ENVIRONMENTAL PROTECTION; ETHYLENE POLYMER; LIGHT DEGRADATION; MOULD; MOULDING; PACKAGING; PE; PHOTODEGRADABLE; PLASTIC; POST-CONSUMER; PP; PRODUCT ANNOUNCEMENT; PROPYLENE POLYMER; RECLAIM; SANDWICH STRUCTURE; STRAP; THERMOPLASTIC; BLOW MOLD; BLOW MOLDING; MOLD; MOLDING  
 SHR PACKAGING, **recycled**,straps; RECLAIMING, packaging  
 CO CMB BOTTLES & SPECIALITY CLOSURES (UK) LTD.; ITW HI-CONE LTD.; PAYNE P.P.,LTD.  
 GT EUROPEAN COMMUNITY; UK; WESTERN EUROPE

L41 ANSWER 14 OF 14 JAPIO (C) 2006 JPO on STN  
 AN 2002-095894 JAPIO  
 TI FRAGRANCE FOR DRYER  
 IN HIDA TOMOKO  
 PA HIDA TOMOKO  
 PI JP 2002095894 A 20020402 Heisei  
 AI JP 2000-331496 (JP2000331496 Heisei) 20000925  
 PRAI JP 2000-331496 20000925  
 SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 2002  
 IC ICM D06F058-02  
 ICS D06F058-20  
 AB PROBLEM TO BE SOLVED: To solve the inconvenience that the conventional dryer only has a function of drying clothes and difficulty in removing the smell of **delegant** and the like at the time of drying.  
 SOLUTION: The fragrance in a net-like outer bag 1 and a spherical container 4 having an opening/closing mechanism of the dryer uses either one suitable for the degree of weight of the clothes to be dried, and a fragrant bag 3 as set forth in claim 2 is an inner bag concerning the fragrance. The fragrant and air-permeable inner bag is made **refillable** and **disposable**, and it is the bag capable of taking a means to change safely, quickly and surely with anti- spilling effects. It is the means provided to use the net-like outer bag 1 and the spherical container 4 separately at the time of drying light and heavy matter. In order to cope

with the destruction by the rotation of a dryer, a zipper 2 is formed to the net-like outer bag 1. Moreover, the spherical container 4 is provided with an opening/closing detachable screw mechanism set forth in figure 4, and it is the fragrance for the dryer provided with safety, a fragrant property and certainty.

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=> => D QUE L55

L6 250130 SEA FILE=HCAPLUS ABB=ON POUCH? OR BAG# OR ENVELOP? OR PACKAG?

L7 22896 SEA FILE=HCAPLUS ABB=ON L6(4A) (MULTI? OR MANY OR SEVERAL? OR 2 OR TWO OR 3 OR THREE)

L8 292 SEA FILE=HCAPLUS ABB=ON L7 AND DETERGENT?/SC,SX,AB,BI

L14 1293 SEA FILE=HCAPLUS ABB=ON L7(6A) (RECYC? OR TREAT? OR DISPOS? OR PROCESS?)

L15 16 SEA FILE=HCAPLUS ABB=ON L8 AND L14

L16 1 SEA FILE=HCAPLUS ABB=ON L15 AND WASTE?/SC,SX,AB,BI

L17 4 SEA FILE=HCAPLUS ABB=ON L15 AND DETERGENT?/SC,SX

L18 4 SEA FILE=HCAPLUS ABB=ON L16 OR L17

L28 2119 SEA FILE=RAPRA ABB=ON L6(4A) (MULTI? OR MANY OR SEVERAL? OR 2 OR TWO OR 3 OR THREE)

L29 627 SEA FILE=RAPRA ABB=ON L28 AND (RECYC? OR TREAT? OR PROCESS OR DISPOS? OR REUS?)

L30 6 SEA FILE=RAPRA ABB=ON L29 AND DETERGENT?

L32 10 SEA FILE=JICST-EPLUS ABB=ON L29 AND DETERGENT?

L34 13067 SEA FILE=JICST-EPLUS ABB=ON RECYCLE+NT/CT

L35 16684 SEA FILE=JICST-EPLUS ABB=ON RESOURCE RECYCLING+NT/CT

L36 2 SEA FILE=JICST-EPLUS ABB=ON L32 AND (L34 OR L35)

L37 7 SEA FILE=JAPIO ABB=ON L29 AND DETERGENT?

L38 2 SEA FILE=JAPIO ABB=ON L37 AND (RECYC? OR REUS? OR REFILL?)

L41 14 DUP REM L18 L30 L36 L38 (0 DUPLICATES REMOVED)

L42 537263 SEA L6

L43 16028 SEA L42 AND RECYC?

L44 182 SEA L43 AND DETERGENT?

L45 147 SEA L44 AND (PLASTIC? OR POLYMER#)

L46 37042 SEA L42(4A) (POLYMER? OR PLASTIC?)

L47 61 SEA L45 AND L46

L49 4622 SEA RECYCL?(4A) (DETERGENT? OR POUCH? OR BAG# OR PACKAG? OR ENVELOP?)

L50 25 SEA L47 AND L49

L51 24 DUP REM L50 (1 DUPLICATE REMOVED)

L52 22 SEA L51 NOT L41

L53 7 SEA L52 AND (BAG# OR ENVELOP? OR POUCH?)

L54 2 SEA L52 AND FILLER?

L55 8 SEA L53 OR L54

=> D L55 1-8 ALL

L55 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1993:23416 HCAPLUS

Correction of: 1992:428400

DN 118:23416

Correction of: 117:28400

ED Entered STN: 24 Jan 1993

TI Separation of filler residues from waste plastic packaging in preparation for recycling

IN Stricker, Urban

PA Germany

SO Ger. Offen., 4 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 IC ICM C08J011-06  
 ICS C07C013-18; B29B017-02  
 CC 38-3 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 60  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4029720	A1	19920402	DE 1990-4029720	19900917
PRAI	DE 1990-4029720		19900917		

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 4029720	ICM	C08J011-06
	ICS	C07C013-18; B29B017-02
	IPCI	C08J0011-06 [ICM,5]; C08J0011-00 [ICM,5,C*]; C07C0013-18 [ICS,5]; C07C0013-00 [ICS,5,C*]; B29B0017-02 [ICS,5]
	IPCR	B03B0009-00 [I,C*]; B03B0009-06 [I,A]; B09B0003-00 [I,A]; B09B0003-00 [I,C*]; B29B0017-02 [I,A]; B29B0017-02 [I,C*]

AB In the title process, especially useful with **packaging** materials for nonfood use, the **packaging** is treated with a solvent in which the **plastic** is insol. The process removes fats, oils, and labels, and the solvents can be **recycled**.

ST **packaging plastic recycling solvent wash**

IT **Recycling of plastics and rubbers**  
 (of **packaging** materials, solvent washing for contents removal in)

IT **Packaging materials**  
 (waste, **recycling of plastic**, solvent washing for contents removal in)

IT **Detergents**  
 (cleaning compns., solvents, for **plastic packaging materials in recycling**)

L55 ANSWER 2 OF 8 RAPRA COPYRIGHT 2006 RAPRA on STN

AN R:606044 RAPRA FS Rapra Abstracts

TI QUESTION OF BALANCE.

AU Russotto N (APME)

SO Shell Chemicals Europe Magazine No.6, Sept.1996, p.13-5

PY 1996

DT Journal

LA English

AB **Plastics** offer a first line of attack in source reduction, a key element of any balanced waste management policy. Since the early 1990s, the **plastics** industry, through the APME, has supported a policy of resource optimisation, minimising the use of total resources during the production and service life of products and maximising recovery or **recycling**. Today's **plastics packaging** is up to 80% lighter than 20 years ago. Reuse of **plastics packages** provides an extended product life, avoids one-trip applications and reduces the total volume of waste.

CC 6P; 1.10

SC \*QO; EN

CT AUTOMOTIVE APPLICATION; BOTTLE; BUILDING APPLICATION; **CARRIER BAG**  
 ; COMPANY; COST; DATA; **DETERGENT**; ENERGY CONSUMPTION; **FOOD**

**PACKAGING; FUEL CONSUMPTION; MANIFOLD; OXYGEN BARRIER;**  
**PACKAGING; PE; PIPE; PLASTIC; POLYAMIDE; POLYETHYLENE;**  
**POUCH; RECYCLING; RESOURCE CONSERVATION; REUSABLE;**  
**RIBBED; SOURCE REDUCTION; THERMAL INSULATION; THERMOPLASTIC; TRAY; WASTE**  
**MANAGEMENT; WEIGHT REDUCTION**  
 SHR **PACKAGING,source reduction; ENVIRONMENTAL PROTECTION,source**  
**reduction,packaging**  
 GT **WESTERN EUROPE-GENERAL; WESTERN EUROPE**

L55 **ANSWER 3 OF 8 RAPRA COPYRIGHT 2006 RAPRA on STN**  
 AN **R:521245 RAPRA FS Rapra Abstracts**  
 TI **REFILL BAGS INCORPORATE POST-CONSUMER WASTE.**  
 SO **Packaging Week 10, No.8, 30th June 1994, p.8**  
**ISSN: 0267-6117**  
 PY **1994**  
 DT **Journal**  
 LA **English**  
 AB **Procter & Gamble has launched laminated PE refill bags**  
**incorporating 25% post-consumer recycled HDPE for some of its**  
**laundry detergent brands. The bags are claimed to use**  
**80% less packaging than the carton equivalent and the amount of**  
**packaging material bound for landfill is estimated to have been**  
**cut by 18 million pounds per year. The article supplies brief details.**  
 CC **42C11; 8.13; 6P12**  
 SC **\*QO; KE; SN**  
 CT **BAG; COMPANY; DETERGENT; ETHYLENE POLYMER;**  
**FILM; HDPE; HIGH DENSITY POLYETHYLENE; LANDFILL; PACKAGING; PE;**  
**PLASTIC; POLYETHYLENE; POST-CONSUMER; PRODUCT ANNOUNCEMENT;**  
**RECYCLING; SHORT ITEM; THERMOPLASTIC; WASTE REDUCTION**  
 SHR **RECYCLING,packaging,waste reduction;**  
**PACKAGING,bags,PE,recycling,**  
**detergents; ETHYLENE POLYMERS,packaging,**  
**recycling**  
 CO **PROCTER & GAMBLE CO.; PARAMOUNT PACKAGING**  
 GT **USA**

L55 **ANSWER 4 OF 8 RAPRA COPYRIGHT 2006 RAPRA on STN**  
 AN **R:516080 RAPRA FS Rapra Abstracts**  
 TI **PROCTER & GAMBLE INTRODUCES REFILL BAGS FOR ITS**  
**DETERGENTS.**  
 SO **Reuse-Recycle 24, No.5, May 1994, p.37**  
**ISSN: 0048-7457**  
 PY **1994**  
 DT **Journal**  
 LA **English**  
 AB **It is reported briefly that Procter & Gamble are to sell their**  
**detergents in plastic bags, for refilling**  
**empty cartons. The bag's construction is described.**  
 CC **42C11; 6P; 8.13**  
 SC **\*KE; QO; SN**  
 CT **BOTTLE; COMPANY; CONTAINER; DETERGENT; ETHYLENE POLYMER**  
**; HDPE; HIGH DENSITY POLYETHYLENE; LAMINATING; LDPE; LOW DENSITY**  
**POLYETHYLENE; MILK; MULTILAYER; PACKAGING APPLICATION;**  
**PLASTIC BAG; PLASTIC; PLASTICS WASTE;**  
**POLYETHYLENE; POST-CONSUMER; RECYCLED CONTENT; REFILLABLE;**  
**THERMOPLASTIC**  
 SHR **ETHYLENE POLYMERS, LDPE, recycled HDPE,**  
**packaging; PACKAGING, recycled HDPE, LDPE;**  
**RECYCLING, HDPE, packaging**  
 CO **PROCTER & GAMBLE**



GT USA  
TN TIDE; CHEER

L55 ANSWER 5 OF 8 RAPRA COPYRIGHT 2006 RAPRA on STN  
AN R:512224 RAPRA FS Rapra Abstracts  
TI LEVER CLEANS UP WITH **PLASTICS** CANNISTERS.  
AU Hunt J  
SO Packaging Week 9, No.41, 28th April 1994, p.1  
ISSN: 0267-6117  
PY 1994  
DT Journal  
LA English  
AB A new reusable container is being promoted by Lever, which is used to **package** its Persil washing powder. The PE container is refillable from PE/paper **bags**, is **recyclable** and easily stacked for display purposes. The container has improved dispensing features in the form of a spout which is claimed to make the cannister the first genuine pouring pack on the market.  
CC 6P2; 42C11  
SC \*QO; KE  
CT COMPANY; DATA; **DETERGENT**; **PACKAGING CONTAINER**; PE; **PLASTIC**; POLYETHYLENE; PRODUCT ANNOUNCEMENT; **RECYCLABLE**; REFILLABLE; REUSABLE; STACKABLE; THERMOPLASTIC  
SHR **PACKAGING**, containers, PE, **detergents**, reusable; ETHYLENE **POLYMERS**, **packaging** containers  
CO LEVER BROS.CO.  
GT EUROPE-GENERAL

L55 ANSWER 6 OF 8 RAPRA COPYRIGHT 2006 RAPRA on STN  
AN R:492630 RAPRA FS Rapra Abstracts  
TI REUSE OF **PLASTIC** MATERIALS FROM POST-CONSUMER PE AND PVC BOTTLES.  
AU Pellegrini A  
CS IVR  
SO Recycle '92 Conference Proceedings  
Editor(s): Maack Business Services  
Davos, 7th-10th April 1992, p.14/3-1 - 14/3-13. 8(13)  
PY 1992  
DT Conference Article  
LA English  
AB In order to develop the applications for recovered PVC and HDPE bottles, a series of industrial trials were performed. HDPE bottles, mainly used for **detergents**, were **recycled** and the pellets used for the internal layer of coextruded bottles, pallets, garbage sacks and shopping **bags**. Used HDPE motor oil bottles were also **recycled** and the **polymer** reused for the manufacture of new motor oil bottles. PVC mineral water bottles were **recycled** and used in the manufacture of drainage pipes and fittings, and electrical conduits. Tabulated property data and **recycling** costs are presented.  
CC 8.13; 42C11; 42C382; 6P21; 62.15  
SC \*SN; KE; KM; QO; OQ  
CT ADDITIVE; **BAG**; BLOW MOULDING; BOTTLE; CAPACITY; COEXTRUSION; COMPANY; CONDUIT; CONSUMPTION; COST ANALYSIS; DATA; **ETHYLENE POLYMER**; FILM; GRAPH; HDPE; HIGH DENSITY POLYETHYLENE; INJECTION MOULDING; LEGISLATION; MECHANICAL PROPERTIES; MELT FLOW INDEX; MELTING POINT; **PACKAGING**; PALLET; PE; PIPE; **PLASTIC**; POLYETHYLENE; POLYVINYL CHLORIDE; POST-CONSUMER; PRODUCTION CAPACITY; PVC; **RECYCLING**; SACK; **SCRAP POLYMER**; SPECIFIC GRAVITY; STATISTICS; TABLES; TECHNICAL; THERMAL ANALYSIS; THERMOPLASTIC;

VICAT SOFTENING POINT; VICAT SOFTENING TEMPERATURE; WASHING; WASTE COLLECTION; BLOW MOLDING; INJECTION MOLDING

SHR **RECYCLING**,HDPE,PVC,bottles; **ETHYLENE POLYMERS**,HDPE, **recycling**,bottles,scrap **polymers**; VINYL CHLORIDE **POLYMERS**,**recycling**,bottles,scrap **polymers**; BOTTLES,HDPE,PVC,**recycling**; **SCRAP POLYMERS**,HDPE,PVC, **packaging**,pipes

GT EUROPEAN COMMUNITY; ITALY; WESTERN EUROPE

L55 ANSWER 7 OF 8 RAPRA COPYRIGHT 2006 RAPRA on STN

AN R:468475 RAPRA FS Rapra Abstracts

TI NEW MARKETS FOR **RECYCLED PLASTIC PACKAGING** MATERIALS.

AU Castiglione D

CS **Plastic Consult**

SO Strategies for Plastics Recycling 1992. Conference Proceedings  
Editor(s): First Europe Communications  
Brussels,30th Sept-1st Oct.1992,Paper 22,pp.11. 8(13)

PY 1992

DT Conference Article

LA English

AB Applications of reclaimed **plastics** in **packaging** are reviewed, and details given of a mixed **plastics recycling** process developed by RPE, a joint venture between AMNU Parma and Mont.Eco of Italy.

CC 62.15; 6P; 8.13

SC \*QO; OQ; SN

CT ADDITIVE; AGEING; **BAG**; BLEND; BLOW MOULD; BOTTLE; BOX; CLOSURE; COEXTRUSION; COMPANY; CONFERENCE; CONSULTANT; CONTAINER; COST; CRATE; DATA; DEPOLYMERISATION; DESIGN; **DETERGENT**; ECONOMIC INFORMATION; **ETHYLENE POLYMER**; EXTRUSION; **FILLER**; FILM; **FOOD PACKAGING**; FORMING; HDPE; HETEROGENEOUS; HIGH DENSITY POLYETHYLENE; INJECTION MOULD; JOINT VENTURE; LDPE; LINEAR LOW; LOW DENSITY POLYETHYLENE; MECHANICAL PROPERTIES; MELT FLOW; MOLECULAR WEIGHT; **PACKAGING**; **PACKAGING FILM**; PALLET; PE; PETP; **PLASTIC**; POLYETHYLENE; POLYETHYLENE TEREPHTHALATE; **POLYMERIC FILLER**; POLYPROPYLENE; POLYSTYRENE; POLYVINYL CHLORIDE; PP; PRICE; PS; PURIFICATION; PVC; PYROLYSIS; RECLAIM; **RECYCLING**; RHEOLOGICAL PROPERTIES; ROTATIONAL MOULD; SACK; SHEET; SHIPPING CONTAINER; STATISTICS; STRAP; TABLES; TECHNICAL; THERMAL CRACKING; THERMOFORM; THERMOPLASTIC; THERMOSET; TRADE NAME; TRAY; **VIRGIN POLYMER**; WASTE; WASTE COLLECTION; WASTE SORTING; WATCH; AGING; BLOW MOLD; DEPOLYMERIZATION; INJECTION MOLD; ROTATIONAL MOLD; PET

SHR **PACKAGING**,**plastics**,reclaiming,reclaimed **plastics**; RECLAIMING,**plastics**,**packaging**; RECLAIMED **PLASTICS**,**packaging**

CO RPE; AMNU PARMA; MONT.ECO

GT BELGIUM; EUROPEAN COMMUNITY; ITALY; WESTERN EUROPE; WESTERN EUROPE-GENERAL

TN GREENWATCH

L55 ANSWER 8 OF 8 JICST-EPlus COPYRIGHT 2006 JST on STN

AN 920184773 JICST-EPlus

TI Some examples of environmentally friendly **packages** for household products.

AU TAKAKU MASAOKI

CS Kao Corp.

SO Hosono Gijutsu (JPI Journal), (1992) vol. 30, no. 2, pp. 194-196. Journal Code: G0839A (Fig. 6)  
ISSN: 0385-728X

CY Japan  
DT Journal; Commentary  
LA Japanese  
STA New  
AB Some of environmentally friendly **packages** for household products have been introduced; Compact carton for super-concentrated **detergent** powders, **Bag**-in box using **recycled** paper for fabric softner, Standing **pouch** for refill of kitchen **detergent** and Simple compact **package** for gift. (author abst.)  
CC QE02020M (621.798.1/.2)  
CT powder **detergent**; liquid **detergent**; carton; **plastic** bottle; waste paper; **bag** in box; **plastic** **pouch**; simplification; environmental conservation; resource conservation  
BT **detergent**; cleaning agent; paper container; container; bottle; **plastic** container; raw material for pulp; raw material; material; **bag**; modification; environmental management; management; saving

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